

An abstract graphic featuring three blue, 3D-rendered spheres of varying sizes. Two thin blue lines originate from the top left and extend diagonally across the page. One line connects to the top of the largest sphere at the bottom right, and the other connects to the top of the medium-sized sphere in the upper right. A third line extends from the top left towards the bottom right, passing behind the text.

# **APPLIED LINGUISTICS AND SECOND LANGUAGE ACQUISITION**

LECTURE NOTES AND TASKS FOR SEMINARS

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## **CONTENTS**

### **MODULE 1. FOUNDATIONS OF APPLIED LINGUISTICS AND SECOND LANGUAGE ACQUISITION**

#### **THEME 1. APPLIED LINGUISTICS AS A FIELD OF STUDY AND SECOND LANGUAGE ACQUISITION**

1. An Introduction to Applied Linguistics.
2. The study of second language acquisition: general considerations.
3. Definitions of basic concepts.
4. The goal of SLA.
5. Connection of SLA with other disciplines.
6. The Nature of Language.
7. The Nature of Nonnative Speaker Knowledge.

#### **THEME 2: SCHOOLS OF THOUGHT IN SECOND LANGUAGE ACQUISITION**

1. Structural Linguistics and Behavioral Psychology
2. Generative Linguistics and Cognitive Psychology
3. Constructivism: A Multidisciplinary Approach
4. Nineteen centuries of language teaching
5. Language teaching in the XXth century

#### **THEME 3: FIRST LANGUAGE ACQUISITION THEORIES**

1. Behaviorist theory.
2. Innatist theory
3. Interactionist theory.
4. First language acquisition insights applied to language teaching.

#### **THEME 4: SECOND LANGUAGE ACQUISITION THEORIES**

1. Theories of SLA.
2. Behaviorist perspective in SLA.
3. Innatist perspective in SLA.
4. Krashen's Five Hypotheses.
5. Interactionist perspective in SLA.

### **MODULE 2: THE LINGUISTICS OF SECOND LANGUAGE ACQUISITION**

#### **THEME 5: THE DEVELOPMENT OF A SECOND LANGUAGE**

1. Order of acquisition, sequence of acquisition, and usage-based accounts of L2 development.
2. Case studies of L2 learners development.
3. Findings of studies of L2 learners' development.

4. Learner varieties in SL acquisition.
5. Development of other linguistic systems.
  - 5.1. Acquisition of L2 phonology.
  - 5.2. Development of the L2 lexicon.
6. The interconnectedness of different L2 systems.

## **THEME 6: APPROACHES TO THE STUDY OF SLA**

1. Early approaches to the study of SLA
  - 1.1. Contrastive Analysis
  - 1.2. Error Analysis
  - 1.3. Interlanguage
2. Recent approaches to the study of SLA
  - 2.1. Universal Grammar
  - 2.2. Linguistic interfaces
  - 2.3. Functional approaches

## **MODULE 3: THE PSYCHOLOGY OF SECOND LANGUAGE ACQUISITION**

### **THEME 7: AGE AND SECOND LANGUAGE ACQUISITION**

1. Age and language proficiency. Critical Period Hypothesis.
2. Age and rate of acquisition.
3. Explanation for differential attainment in language acquisition

### **THEME 8: PSYCHOLOGICAL FACTORS AND SECOND LANGUAGE ACQUISITION**

1. Key psychological factors and second language acquisition (cognitive, conative, affective).
2. Language aptitude.
3. Motivation. Theories of motivation.
4. Language anxiety.
5. Culture shock.
6. Social distance.
7. Extroversion and introversion.

### **THEME 9: NEUROLINGUISTICS AND MULTILINGUALISM**

1. Languages and the brain.
2. Organization of multiple languages in the brain.
3. The effects of multilingualism.

### **THEME 10: LANGUAGE LEARNING STYLES AND STRATEGIES**

1. Learning Styles.
2. Learning Strategies



## **MODULE 1. FOUNDATIONS OF APPLIED LINGUISTICS AND SECOND LANGUAGE ACQUISITION**

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1. An Introduction to Applied Linguistics
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3. Definitions of basic concepts.
4. Connection of SLA with other disciplines.
5. The nature of language.
6. The nature of nonnative speaker knowledge.

**Key terms:** *native language, target language, second language acquisition, foreign language learning, bilingualism, interlanguage, fossilisation, stabilization*

#### **1. An Introduction to Applied Linguistics**

Linguistics is the scientific study of language. Linguists do work on specific languages, but their primary goal is to understand the nature of Language in general. Linguistics is primarily concerned with the nature of language and communication. There are broadly three aspects to the study, including language form, language meaning, and language use in discursive and communicative contexts. Linguistics deals with the study of particular languages, and the search for general properties common to all languages or large groups of languages. Some questions linguistics tries to answer: What distinguishes human language from other animal communication systems? What features are common to all human languages? How are the modes of linguistic communication (speech, writing, sign language of the deaf) related to each other? How is language related to other types of human behaviour? • What is language and how is it organized? • How is it analysed? How are its units discovered and tested, etc.

The term Applied Linguistics (AL) is an Anglo-American coinage. It was founded first at the University of Edinburgh School of Applied Linguistics in 1956. Then at the Center of Applied Linguistics in Washington D.C. in 1957.

The British Association of Applied Linguistics (BAAL) was formally established in 1967, with the following aims: “the advancement of education by fostering and promoting, by any lawful charitable means, the study of language use, language acquisition and language teaching and the fostering of interdisciplinary collaboration in this study” (BAAL, 1994). It was largely taken for granted in the 1960s and 1970s that applied linguistics was about language teaching.

Applied Linguistics entails using what we know about language, about how it is used, and about how it is learned in order to solve some problem in the real world. Applied Linguistics uses language-related research in a wide variety of fields (e.g. language acquisition, language teaching, literacy, gender studies, language policy, speech therapy, discourse analysis, censorship, workplace communication, media studies, translation, lexicography, forensic linguistics).

“AL is the utilization of the knowledge about the nature of language achieved by linguistic research for the improvement of the efficiency of some practical task in which language is a central component” (Corder, 1974, p. 24).

“Applied Linguistics is using what we know about (a) language, (b) how it is learned, and (c) how it is used, in order to achieve some purpose or solve some problem in the real world” (Schmitt & Celce-Murcia, 2002, p. 1).

“The focus of applied linguistics is on trying to resolve language-based problems that people encounter in the real world, whether they be learners, teachers, supervisors, academics, lawyers, service providers, those who need social services, test takers, policy developers, dictionary makers, translators, or a whole range of business clients.” (Grabe, 2002, p. 9).

Defining characteristics of Applied Linguistics:

-Autonomous, multidisciplinary and problem solving: uses and draws on theory from other related fields concerned with language and generates its own theory in order to find solutions to language related problems and issues in the real world.

- Practical concerns have an important role in shaping the questions that AL will address.

- Language related problems concern learners, teachers, academics, lawyers, translators, test takers, service providers, etc.

What is the relationship between AL and other language related disciplines? Applied linguistics occupies an intermediary, mediating position between language related disciplines (linguistics, psycholinguistics and sociolinguistics) and professional practice. It uses theories/principles from language related disciplines in order to understand language related issues and to solve language related problems. The choice of which disciplines are involved in applied linguistics matters depends on the circumstances. Applied linguistics conducts research into professional practice and on the basis of the results develops theory.

Linguistics is primarily concerned with language in itself and in findings ways of analyzing language and building theories that describe language. Applied linguistics is concerned with the role of language in peoples' lives and problems associated with language use in peoples' lives. Linguistics is essential but not the only feeder discipline.

## **2. The Study of Second Language Acquisition: general considerations**

How do people learn a second, or a third, or a fourth language? The simple answer is “with great difficulty.”

What is the study of **second language acquisition**? It is the study of how second languages are learned. It is the study of what is learned of a second language and, importantly, what is not learned; it is the study of why most second language learners do not achieve the same degree of proficiency in a second language as they do in their **native language**; it is also the study of why some individuals appear to achieve native-like proficiency in more than one language. Additionally, SLA is concerned with the nature of the hypotheses (whether

conscious or unconscious) that learners come up with regarding the rules of the second language. Are the rules like those of the native language? Are they like the rules of the language being learned? Are there patterns that are common to all learners, regardless of the native language and regardless of the language being learned?

There have always been those with a broad interest in how people acquire a second language (L2) whether Aristotle or Roger Bacon (Thomas, 1998). With the advent of academic psychology and linguistics, there came a certain amount of curiosity about second language acquisition (SLA) (Thorndike, 1928; Cheydeur, 1932); some linguists kept diaries of bilingual language acquisition (Leopold, 1939); others were interested in multilingualism and bilingualism, particularly in the USA (Weinreich, 1953; Fishman, 1966). Methods for teaching second languages such as Lado (1965) were bolstered with ideas from contemporary language learning theories usually derived from general psychological theories such as Skinner (1957) rather than those specifically about either second language learning or language acquisition in general. In the 1960s these interests from psychology, linguistics and language teaching came together to found a specific discipline of SLA research. For some fifty years this has set itself up as an independent discipline with its own theories and issues.

Thus, SLA is still quite young as a field of study—much younger than well-established disciplines such as psychology or sociology. While there has always been an interest how people acquire second languages, the systematic study of L2 acquisition did not start until the 1960s when Chomsky's (1959) critique of Skinner's *Verbal Behavior*. Since then, SLA has developed exponentially (Ellis, p.398).

SLA investigates the acquisition of a language acquired after the learner's mother tongue.

SLA impacts on, and draws from, many other areas of study, among them linguistics, psychology, psycholinguistics, sociology, sociolinguistics, discourse analysis, conversation analysis, and education, to name a few.

SLA has now developed specialist knowledge related to such issues as individual differences in learning outcomes, the trajectory of development in an L2, variability in L2



systems, L1 transfer, the role of input and interaction, and the cognitive and social processes involved in L2 learning.

### **The goal of SLA**

There is also no clear agreement over the goal of SLA. For much of the history of the discipline, the goal has been the **description and explanation of how people acquire a *second language***, viewed as separate and distinct from the first language. **L2 acquisition is the ‘learning of *any* language after the first’.**

There are moves to reframe it as the study of **bi/multilingualism**. Ortega (2012) argued that L2 acquisition should not just be contrasted with L1 monolingual acquisition from birth, but also with bilingual acquisition from birth. She made the case for what she called the ‘bi/multilingual turn for SLA’—that is, making the goal of SLA not just the study of a *second* language, but of how later-learned languages figure in making a person bi- or multilingual. In a similar vein, Cook (1991) has argued for investigating **multicompetence** on the grounds that the L1 and the L2 should not be treated as separate linguistic systems but as intertwined, each affecting the other.

In general, however, SLA has continued to focus on how learners acquire a second language.

For some SLA researchers, SLA is seen as ‘central to the wider goal of understanding the ontogeny of the human language capacity’ (Ortega 2012: 8). In other words, SLA is seen as contributing alongside other language sciences to an explanation of the special human capacity for language—what this consists of; how it has evolved; and how people draw on it when acquiring a specific language.

There is another goal that has figured strongly in SLA: to **provide guidance about how second languages can be most effectively taught**. This was the goal that motivated much of the early research in SLA. It is premised on the assumption that for language instruction to be effective, it must take account of how learners acquire a language. As Long (2006) noted:

Many SLA researchers have witnessed firsthand the relatively few successes and the widespread failures of even the best-intentioned classroom instruction, and many were first motivated to undergo training as SLA researchers with a view to improving that state of affairs (Long 2006: 156).

### 3. Definitions

**Native language (NL):** This refers to the first language that a child learns. It is also known as the primary language, the mother tongue, or the **L1** (first language).

**Target language (TL):** This refers to the language being learned.

**Second language acquisition:** This is the common term used for the name of the discipline. In general, SLA refers to the process of learning another language after the native language has been learned. Sometimes, the term even refers to the learning of a third or fourth language. The important aspect is that SLA refers to the **learning of a nonnative language after the learning of one's native or primary language**. The second language is commonly referred to as the **L2**. As with the phrase “second language,” L2 can refer to any language learned *after* the L1 has been learned, regardless of whether it is the second, third, fourth, or fifth language. By this term, we mean the acquisition of a second language both in a classroom situation, as well as in more “natural” exposure situations. In addition to referring to the discipline, as noted above, the term *second language acquisition* (not capitalized) can also refer to the process of learning another language.

**Foreign language learning:** Foreign language is generally differentiated from second language in that the former refers to the learning of a nonnative language in the environment of one's native language. This is most commonly done within the context of the classroom. Second language, on the other hand, generally refers to the learning of a nonnative language in the environment in which that language is spoken. This may or may not take place in a classroom setting. The important point is that learning in a second language environment takes place with considerable access to speakers of the language being learned, whereas learning in a foreign language environment usually does not.

We use the generic term SLA to assume learning in a second language and a foreign language context.

### **What is ‘acquisition’?**

‘Acquisition’ is sometimes contrasted with ‘learning’ on the assumption that these involve different processes (Krashen 1981). Acquisition refers to the incidental process where learners ‘pick up’ a language without making any conscious effort to master it; whereas learning involves intentional effort to study and learn a language. On the face of it, this looks very similar to the ‘second’ versus **‘foreign’ language acquisition** distinction: acquisition takes place through communicating in the L2 in a second language context whilst learning takes place through instruction in foreign language contexts. However, this is a false correlation. Both acquisition and learning can take place in both contexts although there may be a bias towards the former in the second language contexts and towards the latter in foreign contexts. The terms ‘L2 acquisition/learning’ will be used interchangeably as cover terms for both naturalistic ‘acquisition’ and instructed ‘learning’. However, it is important to consider whether acquisition and learning are in fact different and— if they are—in what ways.

### **Time to think...**

Consider your own language learning experience. Was it second language learning or foreign language learning, or both? Were they different experiences? In what ways? Consider differences and similarities in areas of pronunciation, grammar, and vocabulary. Is it easier to learn pronunciation in a second or a foreign language environment? What about grammar or vocabulary?

## **4. Connection of SLA with other disciplines**

SLA is truly an **interdisciplinary field**. Over the years, the study of SLA has become inextricably intertwined with **language pedagogy**; But SLA is not about pedagogy, unless the pedagogy affects the course of acquisition.

Although it may be the case that those who are interested in learning about how second languages are learned are interested in doing so for the light this knowledge sheds on the field of language teaching, this is not the only reason SLA is of interest, nor is it the major reason scholars in the field of SLA conduct their research.

Let us briefly consider some of the reasons why it might be important for us to understand how second languages are learned.

- **Linguistics**

*When we study human language, we are approaching what some might call the human essence, the distinctive qualities of mind that are, so far as we know, unique to [humans]. (Chomsky, 1968, p. 100)*

The study of how second languages are learned is part of the broader study of language and language behavior. It has as its larger goal the study of the nature of the human mind. In fact, a major goal of SLA research is the determination of linguistic constraints on the formation of second language grammars.

- **Language pedagogy**

Most graduate programs with the goal to train students in language teaching have required course work in SLA. Why should this be the case? If one is to develop language-teaching methodologies, there has to be a firm basis for those methodologies in language learning. It would be counterproductive to base language-teaching methodologies on something other than an understanding of how language learning does and does not take place.

To give an example, some language-teaching methodologies are based exclusively on rule memorization and translation exercises. That is, a student in a language class is expected to memorize rules and then translate sentences from the native language to the language being learned, and vice versa. However, over the years, research in SLA has made language teachers and curriculum designers aware that language learning consists of more than rule memorization; it also involves learning to express communicative needs. The details of this conceptualization of what language learning is about have resulted in methodologies that

emphasize communication. In other words, pedagogical decision-making must reflect what is known about the process of learning, which is the domain of SLA.

A second rationale related to language pedagogy has to do with the expectations that teachers have of their students. Let's assume that a teacher spends a class hour drilling students on a particular grammatical structure. Let's further assume that the students are all producing the structure correctly, and even in an appropriate context. If, after the class is over and the drill is finished, a student comes up to the teacher and uses the incorrect form of what had just been drilled and drilled in spontaneous speech, what should the teacher think? Has the lesson been a waste of time? Or is this type of linguistic behavior to be expected? If a student produces a correct form, does that necessarily mean that the student has learned the correct rule? These sorts of issues are part of what teachers need to be aware of when assessing the success or failure of their teaching practices.

- **Cross-cultural communication**

In interactions with speakers of another language/culture, we have certain expectations and we often produce stereotyped reactions. For example, we may find ourselves making judgments about individuals based on their language. It turns out that many stereotypes of people from other cultures (e.g., rudeness, unassertiveness) are based on patterns of nonnative speech. These judgments, in many instances, are not justified, because many of the speech patterns that nonnative speakers use reflect their nonnativeness, rather than being characteristics of their personality.

As an example, consider the following exchange between a teacher and a former student (NNS = nonnative speaker; NS = native speaker):

(1-1) From Goldschmidt (1996, p. 255)

NNS: I have a favor to ask you.

NS: Sure, what can I do for you?

NNS: You need to write a recommendation for me.

Many teachers would, of course, react negatively to the seeming gall of this “request,” perhaps initially thinking to themselves, “What do you mean I *need* to write a letter?”, when most likely the only problem is this nonnative speaker’s lack of understanding of the forceful meaning of *need*. It is our point of view that understanding how second languages are learned and how nonnative speakers use language allows us to separate issues of crosscultural communication from issues of stereotyped behavior or personal idiosyncrasies.

#### • **Language policy and language planning**

Many issues of language policy are dependent on a knowledge of how second languages are learned. For example, issues surrounding **bilingualism**, such as the English Only Movement in the United States, or bilingual education (including immersion programs) can only be debated if one is properly informed about the realities and constraints of learning a second language. National language programs often involve decision-making that is dependent on (a) information about second language learning, (b) the kinds of instruction that can be brought to bear on issues of acquisition, and (c) the realities and expectations one can have of such programs. All too often, these issues are debated without a clear understanding of the object of debate, that is, the nature of how second languages are learned.

In sum, SLA is a complex field, the focus of which is the attempt to understand the processes underlying the learning and use of a second language. It is important to reemphasize that the study of SLA is separate from the study of language pedagogy, although this does not mean that there are not implications that can be drawn from SLA to the related discipline of language teaching, or that ideas that arise in classrooms cannot be useful in the understanding of SLA.

#### ***Think ...***

1. What is your motivation for studying SLA? How do you think a knowledge of SLA will help you?

2. How would you describe the relationship between SLA and language pedagogy? Do you have to know something about SLA to teach well? Do you have to know something about teaching to understand SLA?

## 5. The Nature of Language

Fundamental to the understanding of the nature of SLA is an understanding of what it is that needs to be learned. What is language? How can we characterize the knowledge that humans have of language?

There are a number of aspects of language that can be described systematically. In the next few sections, we deal with the **phonology**, **syntax**, **morphology**, **semantics**, and **pragmatics** of language.

### Sound Systems

Knowledge of the sound system (phonology) of our native language is complex. Minimally, it entails knowing what sounds are possible and what sounds are not possible in the language.

### Syntax

It is the knowledge we have of the order of elements in a sentence.

There are two kinds of grammars that are generally referred to: (a) prescriptive grammar and (b) descriptive grammar.

By prescriptive grammar, we mean such rules as are generally taught in school, often without regard to the way native speakers of a language actually *use* language. We have in mind such rules as “Don’t end a sentence with a preposition,” “Don’t split infinitives,” “Don’t begin a sentence with a conjunction,” “Don’t use contractions in writing,” and “Use *between* with two items and *among* with more than two” (Associated Press rule, as cited in Safire, 1999, p. 24).

Linguists are concerned with descriptive grammars: They attempt to describe languages as they are actually used. The rules just stated are not always true of descriptive grammars, because native speakers of English may violate the prescriptive rules.

Native speakers of a language know which are possible sentences of their language and which are not. For example, below, we know that sentences 1–5 and 1–6 are possible English sentences, whereas sentences 1–7 and 1–8 are not possible or are ungrammatical:

(1–5) The big book is on the brown table.

(1–6) The woman whom I met yesterday is reading the same book that I read last night.

(1–7) \*The book big brown table the on is.

(1–8) \*Canceling what's but general how then the two actually.

Thus, part of what we know about language is the order in which elements can and cannot occur. This is, of course, not as simple as the preceding examples suggest. Are sentences 1–9 and 1–10 possible English sentences?

(1–9) Have him to call me back.

(1–10) That's the man that I am taller than.

For many speakers of English, these are strange-sounding; for others, they are perfectly acceptable.

## **Morphology and the Lexicon**

The study of morphology is the study of word formation. In many cases, words are made up of more than one part.

For example, the word *unforeseen* is made up of three parts: *un*, which has a negative function; *fore*, which means earlier in time; and *seen*, which means to visualize. Each part is referred to as a **morpheme**, which can be defined as the minimal unit of meaning.

There are two classes of morphemes that we can identify: bound and free. A bound morpheme is one that can never be a word by itself, such as the *un* of *unlikely*. A free morpheme is one that is a word in and of itself, such as *man*, *woman*, *book*, or *table*.



Not only do we know how to form words using affixes (prefixes, suffixes, infixes), but we also know what words can go with other words, as in *Mt. Everest is a high mountain*, but not *\*The Empire State Building is a high building*. *Tall* is more likely to describe a building than *high*.

## **Semantics**

The study of semantics refers to the study of meaning. This, of course, does not necessarily correspond to grammaticality, because many ungrammatical sentences are meaningful, as can be seen in the following sentences:

(1–18) *\*That woman beautiful is my mother.*

(1–19) *\*I'll happy if I can get your paper.*

These and many other sentences, which may be uttered by nonnative speakers of a language, are perfectly comprehensible, despite the fact that they do not follow the “rules” of English. The reverse side of the picture is the sentence that is grammatically formed but that, because of the content, is meaningless (at least without additional contextualization), as in 1–20:

(1–20) *That bachelor is married.*

## **Pragmatics**

Yet another area of language that we consider and that is part of what second language learners need to learn has to do with pragmatics, or the way in which we use language in context.

For example, when we answer the telephone and someone says *Is Samuel there?*, we know that this is a request to speak with Samuel. It would be strange to respond *yes*, with the caller then saying *thank you* and hanging up, unless the caller did not want to carry on the conversation with Samuel present, or only wanted to know whether or not Samuel was present.

## **6. The Nature of Nonnative Speaker Knowledge**

The basic assumption in SLA research is that learners create a language system, known as an **interlanguage** (IL). This system is composed of numerous elements from the NL and the TL. There are also elements in the IL that do not have their origin in either the NL or the TL. What is important is that the learners themselves impose structure on the available linguistic data and formulate an internalized system (IL).

Patterns in IL systems are both consistent and dynamic. What we eventually want to understand is: What is the nature of the IL system, how does it come to be, and why does it generally fail to be the same as a system underlying native speaker knowledge. With regard to the latter, an important question is: Why are learners exposed to something (often many times) but still remain unable to reproduce it in a way that matches that of native speakers?

Central to the concept of IL is the concept of **fossilization**, which generally refers to the cessation of learning. The *Random House Dictionary of the English Language* (Flexner & Hauck, 1988, p. 755) defines fossilization of a linguistic form, feature, rule, and so forth in the following way: “*to become permanently established in the inter -language of a second language learner in a form that is deviant from the target-language norm and that continues to appear in performance regardless of further exposure to the target language.*”

Because of the difficulty in determining when learning has ceased, one frequently refers to **stabilization** of linguistic forms, rather than fossilization or cessation of learning. In SLA, one often notes that IL plateaus are far from the TL norms. Furthermore, it appears to be the case that fossilized or stabilized ILs exist, no matter what learners do in terms of further exposure to the TL. Unfortunately, a solid explanation of permanent or temporary learning plateaus is lacking at present, owing, in part, to the paucity of **longitudinal** studies that would be necessary to create the databases necessary to come to conclusions regarding “getting stuck” in another language.

**Time to Think ...**

1. In what ways is your knowledge of a second language similar or different from your L1 knowledge?

2. The following sentences were produced by native speakers of Arabic:

a. I bought a couple of towel.

b. There is many kind of way you make baklawas.

c. There are about one and half-million inhabitant in Jeddah.

Which linguistic items (and arrangements of items) do you think come from the target language, which come from the native language, and which are autonomous? As a way to begin, think about whether learners of English or languages other than Arabic are likely to utter similar sentences.

## **Conclusion**

SLA as an interdisciplinary discipline by nature, drawing on and contributing to a number of other social sciences that study human behavior, such as linguistics, education, psychology, and many others. The questions asked in these and other fields and the means or methods used to answer those questions have had a substantial influence on the interests of SLA researchers.

Many purposes exist for studying SLA and the numerous applications. Findings from SLA research are used to inform the practices and decisions made by language teachers and educational policymakers, among others.

Terminology:

- NL
- TL
- SLA
- Foreign language versus second language learning;

Basic linguistic concepts:

- sound systems/phonology
- syntax
- morphology
- lexicon
- semantics
- pragmatics;

Nonnative speaker knowledge and how it differs from native-speaker knowledge:

- quantitatively (e.g., breadth of vocabulary);
- qualitatively (e.g., conscious versus subconscious knowledge of structures and patterns).

## ***TASKS FOR SEMINAR 1: SECOND LANGUAGE ACQUISITION AS A FIELD OF STUDY***

Topics for discussion:

1. The study of second language acquisition: general considerations. The goal of SLA.
2. Definitions.
3. Connection of SLA with other disciplines.
4. The Nature of Language
5. The Nature of Nonnative Speaker Knowledge

### **Assignments**

1. A teacher has drilled students in a structure called indirect questions:

- Do you know where my book is?
- Do you know what time it is?
- Did he tell you what time it is?

As a direct result of the drills, all students in the class were able to produce the structure correctly in class.

After class, a student came up to the teacher and asked, “Do you know where is Mrs. Irving?”

In other words, only minutes after the class, in spontaneous speech, the student used the structure practiced in class incorrectly. Describe what you think the reason is for this misuse. Had the lesson been a waste of time? How would you find out?

2. Consider the differences between child language acquisition and adult SLA. Specifically, consider the example provided in (1–2).

(1–2) I want the toy that the little boy is playing with.

With regard to this sentence, we state that, a child could utter this fully formed sentence, which includes a relative clause (“that the little boy is playing with”), without being able to articulate the function of relative clauses (either this one, or relative clauses in general) and without being able to easily divide this sentence into its component parts. It is in this sense that the complex knowledge we have about our native language is largely unconscious.

Do you think that this comment is also valid for adults learning a second language? Specifically, do you think that an adult needs to consciously learn the grammar of relative clauses *before* being able to use them spontaneously in IL? Take an example from your own language-learning or language-teaching experience and relate it to these child versus adult distinctions.

3. a. Create a list of some of the main reasons for the well-attested existence of fossilization in IL.

b. Exchange your list with that of someone else and come up with a common list.

4. In section 1.3.2, we describe the types of knowledge that individuals have about sentences in their native language. We note that there is variation in native speakers' acceptance of sentences, as in sentences 1–9 and 1–10.

(1–9) Have him to call me back.

(1–10) That's the man that I am taller than.

Are these sentences acceptable to you? If not, what would you say instead? In what situations, if any, would you say these sentences? Consider how and when such variation might occur in terms of second language syntactic knowledge. If native speakers vary in what they think is or is not acceptable, how does that affect second language learning?

5. Following are English translations of compositions written by two school-children in their native language (Tatar) and compositions written by the same children in Russian, their L2. In all instances, the children were describing a picture.

*Child 1 (written in Tatar):*

The long awaited spring has come. The days are getting warmer and warmer. The blue sky is covered by white fluffy clouds. They skim like sailboats through the sky. The ice is breaking away on the river to the north. The birds have returned after having flown from us to a warm region. The apples have bloomed. Children are planting tomatoes, cucumbers, onions, and

other vegetables. They are watering the trees. Azat is planting flowers. Rustam is watering the apples. The children are happily working in the garden. They are very happy.

*Child 1 (written in Russian):*

In the schoolyard there is a large garden. Children are digging in the earth. Children are working in the garden. In the garden there is a pine tree, an oak, and tomatoes. An apple tree is growing there. They are planting flower beds.

*Child 2 (written in Tatar):*

It was a beautiful spring day. The sun was shining. The birds who had returned from distant lands were singing. The trees were swallowed up by the greenery of the luxuriant spring foliage. The children have come into their garden. There the apple trees have already blossomed. Rustam is watering the flowers. The remaining children are planting vegetables. The teacher is watching the work of her pupils. She's pleased with their work, she smiles.

*Child 2 (written in Russian):*

In the schoolyard there is a large garden. Children are working there. The garden is big. In the garden there are trees. A child is planting a tree. A child is pouring water from a watering pot. In the garden a poplar is growing.

What kind of information (e.g., descriptive or evaluative) do these children include in their TL descriptions of these pictures? In their NL descriptions of the pictures? What similarities/differences are there between the NL and TL versions of these pictures?

6. In pairs, answer "True" or "False" to the following statements. Justify your responses. Once you come to a consensus, compare your answers with those of another pair. Note that, in some of the cases, arguments can be made for a "true" response as well as a "false" response.

- a. Any child without cognitive disabilities can learn any language with equal ease.
- b. Learning an L2 is a matter of learning a new set of habits.

- c. The only reason that some people cannot learn a second or foreign language is that they are insufficiently motivated.
- d. All children can learn a second language accent-free.
- e. All human beings have an innate capacity to learn language.
- f. Vocabulary is the most important part of learning an L2.
- g. Vocabulary is the most difficult part of learning an L2.
- h. Instruction is a waste of time.
- i. Learning an L2 takes no more time than learning an L1.

**Suggested literature:**

- Gass S. 4<sup>th</sup> ed. (2013). Second Language Acquisition: An Introductory Course (p. 1-15).
- Ellis R. (2015). Understanding Second Language Acquisition. (topics 1, 14).

## Theme 2: SCHOOLS OF THOUGHT IN SECOND LANGUAGE ACQUISITION

1. Structural Linguistics and Behavioral Psychology
2. Generative Linguistics and Cognitive Psychology
3. Constructivism: A Multidisciplinary Approach
4. Nineteen centuries of language teaching
5. Language teaching in the XXth century

Some historical patterns emerge that highlight trends and fashions in the study of second language acquisition. These trends will be described here in the form of three different schools of thought—primarily in the fields of linguistics and psychology—that follow somewhat historically, even though components of each school overlap chronologically to some extent.

### 1. Structural Linguistics and Behavioral Psychology

In the 1940s and 1950s, the **structural**, or **descriptive**, school of linguistics, with its advocates—Leonard Bloomfield, Edward Sapir, Charles Hockett, Charles Fries, and others—prided itself in a rigorous application of scientific observations of human languages. Only "publicly observable responses" could be subject to investigation. The linguist's task, according to the **structuralist**, was to describe human languages and to identify the structural characteristics of those languages. Structural linguists examined only overtly observable data. Of further importance to the structural or descriptive linguist was the notion that language could be divided into small pieces or units and that these units could be described scientifically, contrasted, and added up again to form the whole. From this principle emerged an unchecked rush of linguists, in the 1940s and 1950s, to the far reaches of the earth to engage in the rigorous production of detailed descriptions of "exotic" languages.

## CLASSROOM CONNECTIONS



**Research Findings:** The prevailing paradigm in linguistic research in the 1940s and 1950s viewed language as a linear, structured system that described grammatical sequences in terms of separate components that could comprise a sentence. These analyses were what Noam Chomsky later called "surface structure" relationships.

**Teaching Implications:** No one may have better manifested structural linguistics in the classroom than Charles Fries, whose "structural drills" and "pattern practices" were described in his (1945) book, *Teaching and Learning English as a Foreign Language*, and in his (1952) book, *The Structure of English*. The very popular Audiolingual Method drew many insights from Fries's seminal work. What do you think are the advantages and disadvantages of pattern drills in the language classroom?

Among psychologists, a behavioral paradigm also focused on publicly observable responses—those that can be objectively perceived, recorded, and measured. The scientific method was rigorously adhered to, and therefore such concepts as consciousness and intuition were regarded as illegitimate domains of Inquiry. The unreliability of observation of states of consciousness, thinking, concept formation, or the acquisition of knowledge made such topics impossible to examine in a behavioral framework. You may be familiar with the classical experiments with Pavlov's dog and Skinner's boxes; these too typify the position that organisms can be conditioned to respond in desired ways, given the correct degree and scheduling of reinforcement.

## 2. Generative Linguistics and Cognitive Psychology

In the decade of the 1960s, **generative-transformational linguistics** emerged through the influence of Noam Chomsky and a number of his followers. Chomsky was trying to show that human language cannot be scrutinized simply in terms of observable stimuli and responses or the volumes of raw data. The generative linguist was interested not only in describing language (achieving the level of **descriptive adequacy**) but also in arriving at an

**explanatory** level of adequacy in the study of language, that is, a "principled basis, independent of any particular language, for the selection of the descriptively adequate grammar of each language" (Chomsky, 1964, p. 63).

Early seeds of the generative-transformational revolution were planted near the beginning of the twentieth century. Ferdinand de Saussure (1916) claimed that there was a difference between *parole* (what Skinner "observes," and what Chomsky called **performance**), on the one hand, and *langue* (akin to the concept of **competence**, or our underlying and unobservable language ability). A few decades later, however, descriptive linguists chose largely to ignore *langue* and to study *parole*.

Similarly, cognitive psychologists asserted that meaning, understanding, and knowing were significant data for psychological study. Instead of focusing rather mechanistically on stimulus-response connections, cognitivists tried to discover psychological principles of organization and functioning.

Cognitive psychologists, like generative linguists, sought to discover underlying motivations and deeper structures of human behavior by using a **rational** approach. That is, they freed themselves from the strictly empirical study typical of behaviorists and employed the tools of logic, reason, extrapolation, and inference in order to derive explanations for human behavior.

e.g. If you were to observe someone walk into your house, pick up a chair and fling it through your window, and then walk out, different kinds of questions could be asked. One set of questions would relate to *what* happened: the physical description of the person, the time of day, the size of the chair, the impact of the chair, and so forth. Another set of questions would ask *why* the person did what he or she did: what were the person's motives and psychological state, what might have been the cause of the behavior, and so on. The first set of questions is very rigorous and exacting: it allows no flaw, no mistake in measurement; but does it give you ultimate answers? The second set of questions is richer, but obviously riskier. By daring to ask some difficult questions about the unobserved, we may lose some ground but gain more profound insight about human behavior.

### 3. Constructivism: A Multidisciplinary Approach

**Constructivism** is hardly a new school of thought. Jean Piaget and Lev Vygotsky, names often associated with constructivism, are not by any means new to the scene of language studies. Yet constructivism emerged as a prevailing paradigm only in the last part of the twentieth century, and is now almost an orthodoxy.

What is constructivism, and how does it differ from the other two viewpoints described above? **First.** It will be helpful to think of two branches of constructivism: cognitive and social. In the **cognitive** version of constructivism, emphasis is placed on the importance of learners constructing their own representation of reality. "Learners must individually discover and transform complex information if they are to make it their own, [suggesting] a more active role for students in their own learning than is typical in many classrooms" (Siavin, 2003. pp. 257-258). Such claims are rooted in Piaget's (1954, 1955, 1970; Piaget & Inhelder. **1969**) seminal work in the middle of the twentieth century, but have taken that long to become widely accepted views, for Piaget, "learning is a developmental process that involves change, self-generation, and construction, each building on prior learning experiences" (Kaufman, 2004, p. 304).

**Social constructivism** emphasizes the importance of social interaction and cooperative learning in constructing both cognitive and emotional images of reality.

Spivey (1997, p. 24) noted that constructivist research tends to focus on "individuals engaged in social practices, ... on a collaborative group, [or] on a global community." "The champion of social constructivism is Vygotsky (1978), who advocated the view that "children's thinking and meaning-making is socially constructed and emerges out of their social interactions with their environment" (Kaufman, 2004. p. 304).

#### CLASSROOM CONNECTIONS

**Research Findings:** Constructivism is a school of thought that emphasizes both the learner's role in constructing meaning out of available linguistic input and the importance of social interaction in creating a new linguistic system. Early constructivists like Vygotsky and Piaget actively emphasized their views many decades ago. What took the language *teaching* profession so long to apply such thinking to classroom practices?

**Teaching Implications:** Perhaps prevailing views of behavioral psychology curbed an outburst of interactive language teaching. However, as early as the 1970s, some methods advocated the central role of the learner's construction of language (the Silent Way and Community Language Learning) and the importance of meaningful interaction (early forms of the Notional-Functional Syllabus, which started in the United Kingdom). What evidence of constructivism do you see in current foreign language classrooms?

One of the most popular concepts advanced by Vygotsky was the notion of a **zone of proximal development** (ZPD) in every learner: the distance between learners' existing developmental state and their potential development. Put another way, the ZPD describes tasks that a learner has not yet learned but is capable of learning with appropriate stimuli. The ZPD is an important facet of social constructivism because it describes tasks "that a child cannot yet do alone but could do with the assistance of more competent peers or adults" (Slavin, 2003. p. 44).

#### **4. Nineteen centuries of language teaching**

A survey of research and theoretical trends in SLA remains abstract and unfocused without its application to the practical concerns of pedagogy in the classroom. Now we are going to discuss pedagogical trends and issues in the twentieth century. What do we know about language teaching in the two or three millennia prior? The answer is: not very much.

In the Western world, "foreign" language learning in schools was synonymous with the learning of Latin or Greek. Latin, thought to promote intellectuality through "mental gymnastics," was until relatively recently held to be indispensable to an adequate higher

education. Latin was taught by means of the **Classical Method**: focus on grammatical rules, memorization of vocabulary and of various declensions and conjugations, translation of texts, doing written exercises. As other languages began to be taught in educational institutions in the eighteenth and nineteenth centuries, the Classical Method was adopted as the chief means for teaching foreign languages. Little thought was given at the time to teaching oral use of languages; after all, languages were not being taught primarily to learn oral/aural communication, but to learn for the sake of being "scholarly" or, in some instances, for gaining a reading proficiency in a foreign language. Since there was little if any theoretical research on second language acquisition in general, or on the acquisition of reading proficiency, foreign languages were taught as any other skill was taught.

So language teaching before the twentieth century is best captured as a "tradition" that, in various manifestations and adaptations, has been practiced in language classrooms worldwide even up to the present time. Late in the 19th century, the Classical Method came to be known as the **Grammar Translation Method**. There was little to distinguish Grammar Translation from what had gone on in foreign language classrooms for centuries, beyond a focus on grammatical rules as the basis for translating from the second to the native language. But the Grammar Translation Method remarkably withstood attempts at the outset of the twentieth century to "reform" language teaching methodology, and to this day it remains a standard methodology for language teaching in educational institutions. Prator and Celce-Murcia (1979, p. 3) listed the major characteristics of Grammar Translation:

1. Classes taught in the mother tongue; little use of the L2
2. Much vocabulary taught in the form of lists of isolated words
3. Elaborate explanations of the intricacies of grammar
4. Reading of difficult classical texts begun early
5. Texts treated as exercises in grammatical analysis
6. Occasional drills and exercises in translating sentences from LI to L2
7. Little or no attention to pronunciation

It is remarkable, in one sense, that this method has been so stalwart among many competing models. It does nothing to enhance a student's communicative ability in the language. It is "remembered with distaste by thousands of school learners, for whom foreign language learning meant a tedious experience of memorizing endless lists of unusable grammar rules and vocabulary and attempting to produce perfect translations of stilted or literary prose" (Richards & Rodgers, 2001, p. 4).

In another sense, however, one can understand why Grammar Translation is so popular. It requires few specialized skills on the part of teachers. Tests of grammar rules and of translations are easy to construct and can be objectively scored. Many standardized tests of foreign languages still do not attempt to tap into communicative abilities, so students have little motivation to go beyond grammar analogies, translations, and rote exercises. And it is sometimes successful in leading a student toward a reading knowledge of a second language. But, as Richards and Rodgers (2001, p. 7) pointed out, "it has no advocates. It is a method for which there is no theory. There is no literature that offers a rationale or justification for it or that attempts to relate it to issues in linguistics, psychology, or educational theory."

## **5. Language teaching in the XXth century**

The XXth century trend is best described as looking for the "best" way to teach a foreign language. Perhaps beginning with Francois Gouin's (1880) *Series Method*, foreign language teaching underwent some revolutionary trends.

As schools of thought have come and gone, so have language teaching trends waned in popularity. Albert Marckwardt (1972, p. 5) saw these "changing winds and shifting sands" as a cyclical pattern in which a new paradigm of teaching methodology emerged about every quarter of a century, with each new method breaking from the old but at the same time taking with it some of the positive aspects of the previous paradigm.

One of the best examples of the cyclical nature of methods is seen in the revolutionary Audiolingual Method (ALM) of the late 1940s and 1950s. The ALM with its overemphasis on oral production drills, borrowed tenets from its predecessor by almost half a century the Direct Method, but had essentially sprung from behavioral theories of learning of the time. The ALM was a rejection of its classical predecessor, the Grammar Translation Method. Within a short time, however, with the increasing popularity of cognitive psychology, ALM critics were advocating more attention to rules and to the "cognitive code" of language, which, to some, smacked of a return to Grammar Translation.

Since the early 1970s, the relationship of theoretical disciplines and teaching methodology has been continued to manifest itself. The field of psychology, as noted in outlining tenets of constructivism, has witnessed a growing interest in interpersonal relationships, the value of group work, and the use of numerous cooperative strategies for attaining desired goals. The same era has seen linguists searching ever more deeply for answers to the nature of communication and Communicative competence and for explanations of the interactive, socio-cultural process of language acquisition.

The language teaching profession has mirrored these theoretical trends with approaches and techniques that have stressed the importance of self-esteem, intrinsic motivation, students cooperatively learning together, of developing individual strategies for constructing meaning, and above all of focusing on the communicative process in language learning.

Today, many of the pedagogical trends of the last few decades are appropriately captured in the term **Communicative Language Teaching** (CLT), now a catch phrase for language teachers. CLT is an eclectic blend of the contributions of previous methods into the best of what a teacher can provide in authentic uses of the second language in the classroom. Indeed, the single greatest challenge in the profession is to move significantly beyond the teaching of rules, patterns, definitions, and other knowledge "about" language to the point that we are teaching our students to communicate genuinely, spontaneously, and meaningfully in the second language.

A significant difference between current language teaching practices and those of a half a century ago is the absence of "best" methods. We are well aware that methods are too narrow and too constrictive to apply to a wide range of learners in an enormous number of situational contexts. There are no instant recipes. No quick and easy method is guaranteed to provide success. As Bell (2003), Brown (.2001), Kumaravadivelu (2001), and others have appropriately shown, pedagogical trends in language teaching now spur us to develop a principled basis—sometimes called an approach (Richards & Rodgers, 2001)—upon which teachers can choose particular designs and techniques for teaching a foreign language in a specific context. Every learner is unique. Every teacher is unique. Every learner-teacher relationship is unique, and every context is unique. Your task as a teacher is to understand the properties of those relationships and contexts. Then, using a cautious, enlightened, eclectic approach, you can build a set of foundation stones—a theory, if you will—based on principles of second language learning and teaching.



## ***TASKS FOR SEMINAR 2: SCHOOLS OF THOUGHT IN SECOND LANGUAGE ACQUISITION***

Topics for discussion:

1. Structural Linguistics and Behavioral Psychology.
2. Generative Linguistics and Cognitive Psychology.
3. Constructivism: A Multidisciplinary Approach.
4. Nineteen centuries of language teaching.
5. Language teaching in the XXth century.

individual work (I), group/pair (G) work, or (whole) class (C) discussion, as suggestions to the instructor on how to incorporate the topics and questions into a class session.

1. (I) Prepare a table presenting schools of thought in second language acquisition. In three columns write about their main representatives, typical themes, implications for language teaching.

<i>representatives</i>	<i>typical themes</i>	<i>implications for language teaching</i>

2. (G) Assume roles of advocates of the different schools of thought discussed in the lecture notes. First discuss in groups and then present your views related to the problems of language acquisition and language teaching. Point to the weak points in the stance of the rival schools of thought.
3. (C) What did Twaddeli (1935, p. 57) mean when he said, "The scientific method is quite simply the convention that mind does not exist"? What are the advantages and disadvantages of attending only to "publicly observable responses" in studying human behavior? Don't limit yourself only to language teaching in considering the ramifications of behavioral principles.

4. (T) In the discussion of constructivism as a school of thought, Vygotsky is cited as a major influence in our understanding of constructivism, especially social constructivism. Restate Vygotsky's philosophy in your own words and offer some classroom examples of Vygotsky's theories in action.
5. (G) Looking back at the three schools of thought described in this chapter, in a small group, suggest some examples of activities in the language classroom that would be derived from one of the three perspectives, as assigned to your group. From those examples, try to derive some simple descriptors of the three schools of thought.
6. (O) Considering the productive relationship between theory and practice, think of some examples (from any field of study) that show that theory and practice are interactive. Next, think of some specific types of activities typical of a foreign language class you have been in (choral drills, translation, reading aloud, using a vocabulary word in a sentence, etc.), What kind of theoretical assumptions underlie these activities? How might the success or failure of the activity possibly alter the theory behind it?
7. (G) Richards and Rodgers (2001, p. 7) said the Grammar Translation Method "is a method for which there is no theory." Why did they make that statement? Do you agree with them? Share in a group any experiences you have had with Grammar Translation in your foreign language classes, and evaluate its effectiveness.
8. Write a plan representing the main developmental stages in the approaches to language teaching.
9. What are the main trends in the 20th century language teaching? Summarize the main points made by Brown (2007).
10. (T) At the end of the chapter, twentieth century language teaching methodology is described as one that evolved into an *approach* rather than a specific accepted *method*, with the Direct Method and Audiolingual Method cited as examples of the latter. What is the difference between approach and method? Describe classroom examples of each.

## SUGGESTED READINGS

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### THEME 3: FIRST LANGUAGE ACQUISITION THEORIES

1. Behaviorist theory.
2. Innatist theory
3. Interactionist theory.
4. First language acquisition insights applied to language teaching.

**Key terms:** behaviourism, innatist theory, innate, universal grammar, language acquisition device, scaffolding

*Our favorite first language learner is our young granddaughter, Hope. When Hope visits us, we enjoy playing hide-and-seek, reading books to her, and just listening to her talk. Recently, while playing a board game with Hope, Grandpa pronounced the r in rabbit as a w, saying, "It's a wabbit!" Hope was tickled by this. She immediately grinned with knowing amusement and giggled, "Him don't say it right!" At 3 Hope was confident enough about her own knowledge of phonology to point out the phonemic impropriety of an adult's pronunciation. At the same time, she remained oblivious to her own grammatical infelicities. We didn't correct Hope's grammar because we assumed that with time she would outgrow that phase to become mature in her language use, and eventually she did. Many parents and grandparents have similar stories to tell.*

How do language acquisition theories explain observations such as these? Three basic theories of first language acquisition have been put forward over the years: behaviorist, innatist, and interactionist (Lightbown & Spada, 1993). We now discuss each briefly.

#### 1. Behaviorist theory

You are probably familiar with behaviorism as a major learning theory emphasizing stimulus, response, and reinforcement as the basic elements of learning. For language acquisition, behaviorists hypothesized that children learned their first language through stimulus, response, and reinforcement as well, postulating imitation and association as essential processes. For example, to learn the word *ball*, the child would first associate the word *ball* with the familiar spherical object, the stimulus. Next the child would produce the word by imitation, at which time an adult would praise the child for saying *ball*, thereby

reinforcing the child's correct verbal response. Behaviorists assumed that the child's mind was a *tabula rasa*, a blank mental slate awaiting the scripture of experience.

Behaviorist concepts of imitation and reinforcement could not account for typical child utterances like "Him don't say it right," which were clearly not imitations of adult speech. Moreover, behaviorists could not explain how any novel utterance was produced, even those that were grammatically correct. Yet most utterances we produce in conversation or writing are in fact original. That is, they are not pat phrases we have learned by hearing and repeating. In addition, child language researchers noticed that parents typically reinforce their children for the meaning of their utterances, not for grammatical correctness.

These and other concerns were boldly pointed out as Noam Chomsky (1957) engaged in a heated debate with behaviorist B. F. Skinner (1957), attacking behaviorist theory as inadequate to explain observations of child language development.

## 2. Innatist theory

Chomsky was able to garner some strong arguments against the behaviorist explanation of language acquisition, using examples from children's developing grammars, such as our example from Hope.

Skinner and his behaviorist colleagues were experts in psychology, applying their theories to verbal behavior. Chomsky, on the other hand, was a linguist with a genius for analyzing syntax. In fact, his early work on syntax and transformational grammar revolutionized the field of linguistics (Chomsky, 1957, 1959). Chomsky's explanations of grammatical rules and transformations became the subject of psychological research on language use in the interdisciplinary field of psycholinguistics.

As Chomsky pondered the complex intricacies of children's development of grammar, he concluded that language acquisition could only be accounted for by an innate, biological **language acquisition device** (LAD) or system. Infants must come into the world "prewired for linguistic analysis." Specifically, Chomsky claims that infants universally possess an

innate “grammar template,” or **universal grammar**, which will allow them to select out the many grammatical rules of the language they hear spoken around them, as they gradually construct the grammar of their mother tongue.

From the innatist perspective, children construct grammar through a process of hypothesis testing. For example, a child may hypothesize the rule that *all* plural nouns end with an -s. Thus when they come to a word such as *child*, they form the plural as *childs*, or when they come to the word *man*, they say *mans* for the plural. Gradually, they will revise their hypothesis to accommodate exceptions to the plural rule. Thus children create sentences by using rules rather than by merely repeating messages they have heard, as assumed by behaviorists.

Children acquire the rules, according to Chomsky, with little help from their parents or caregivers. But as Harvard psychologist Howard Gardner stated (Gardner, 1995, p. 27), the Chomskyan view is “too dismissive of the ways that mothers and others who bring up children help infants to acquire language.” Gardner argues that, “while the principles of grammar may indeed be acquired with little help from parents or other caretakers, adults are needed to help children build a rich vocabulary, master the rules of discourse, and distinguish between culturally acceptable and unacceptable forms of expression.” This interest in the role of people in the social environment provides the focus of the next theoretical perspective on language acquisition that we discuss, the interactionist perspective. In response to Chomsky’s emphasis on innate grammar mechanisms centered in the infant, interactionists have brought back an interest in the role of the social environment and the influence of parents and caregivers on children’s language acquisition.

### **3. Interactionist theory**

According to the interactionist position, caregivers play a critical role in adjusting language to facilitate the use of innate capacities for language acquisition. This is in sharp contrast to the innatist view that adapting language has little effect on a child’s acquisition

process. The interactionist view thus takes into consideration the importance of both nature and nurture in the language acquisition process.

Interactionists study the language mothers and other caregivers use when caring for infants and young children, with special attention to modifications they make during these social interactions to assist children in communication.

One strategy often observed between English-speaking, middle-class mothers and their toddlers is conversational scaffolding (Ninio & Bruner, 1978), as illustrated in the following conversation:

**CHILD:** Birthday cake Megan house.

**MOTHER:** We had birthday cake at Megan's house. What else did we do at Megan's house?

**CHILD:** Megan dolly.

**MOTHER:** Megan got a doll for her birthday, didn't she?

In this conversation, the mother repeats the child's meaning using an expanded form, thereby verifying her understanding of the child's words while modeling adult usage. In addition, the mother assists or scaffolds the toddler's participation in the conversation through prompting questions at the end of each of her turns. In this way, scaffolding provides conversational assistance and focused linguistic input tuned to the child's own interests and language use at that moment. By preschool age, this kind of scaffolded conversation is no longer necessary.

Whether scaffolding is actually necessary for language acquisition has not been verified. In fact, ways in which infants and young children are spoken to varies across cultures (Ochs & Schieffelen, 1984; Schieffelin & Eisenberg, 1984). Nonetheless, caregivers generally facilitate children's vocabulary development, their ability to use language appropriately in social situations, and their ability to get things done through language.

Children's language develops over time, not within a single interaction. As children develop language, they must construct the meanings of thousands of words. Adult assistance in this process is illustrated in the following dialogues, as British linguist M. A. K. Halliday and his wife (1984, 1994) interact with their son, Nigel. This transcript captures Nigel's

“ongoing construction” of the concept of cats as it transpired over a period of eight months. In these dialogues, we witness Nigel’s semantic development as he both contributes and receives information to help him construct the concept cat.

**Nigel at 2; 10; 22 (2 years; 10 months; 22 days)**

**NIGEL:** And you [that is, “I”] saw a cat in Chania Falls.

**MOTHER:** Yes, you saw a cat in Chania Falls.

**NIGEL:** And you picked the cat up. Mummy, do cats like meat?

**MOTHER:** Yes, they do.

**NIGEL:** Do cats like bones? Do cats like marrow?

**Nigel at 3; 0; 26**

**NIGEL:** How do the cat’s claws come out?

**FATHER:** They come out from inside its paws. Look, I’ll show you.

**NIGEL:** Does it go with its claws?

**FATHER:** Not if it’s going along the ground.

**NIGEL:** And not if it’s climbing up a tree?

**FATHER:** Yes, if it’s climbing up a tree it does go with its claws.

**Nigel at 3; 5; 12**

**NIGEL:** Cats have no one else to stop you from trossing them . . . cats have no other way to stop children from hitting them . . . so they bite. Cat, don’t go away! When I come back I’ll tell you a story. [He does so.]

**Nigel at 3; 6; 12**

**NIGEL:** Can I give the cat some artichoke?

**MOTHER:** Well, she won’t like it.

**NIGEL:** Cats like things that go; they don’t like things that grow.

**Nigel at 3; 6; 14**

**NIGEL:** I wish I was a puppet so that I could go out into the snow in the night. Do puppets like going out in the snow?

**FATHER:** I don’t know. I don’t think they mind.

**NIGEL:** Do cats like going out in the snow?

**FATHER:** Cats don’t like snow.

**NIGEL:** Do they die? [He knows that some plants do.]

**FATHER:** No, they don’t die; they just don’t like it.

**NIGEL:** Why don’t puppets mind snow?

**FATHER:** Well [hesitating] . . . puppets aren’t people.

**NIGEL:** Yes, but . . . cats also aren’t people.

**FATHER:** No, but cats are alive; they go. Puppets don’t go.

**NIGEL:** Puppets do go.

**FATHER:** Yes, but you have to make them go, like trains.

**NIGEL:** Trains have wheels. Puppets have legs.



**FATHER:** Yes, they have legs; but the legs don't go all by themselves. You have to make them go.\*

Children are constantly constructing meaning as they interact with people and the world around them, and through these interactions, they gradually sort out the nuances and construct the multiple meanings of words and phrases. The interactionist perspective acknowledges the important roles of both the child and the social environment in the language acquisition process.

### CLASSROOM CONNECTIONS

*Research Findings:* There is wide evidence of children's ability to comprehend quantitatively more language than they can produce. The same is true of adults, in both foreign and native languages. We can take in words, phrases, grammar, styles, and discourse that we never actually produce.

*Teaching Implications:* James Asher's (1977) "comprehension approach" to learning foreign languages was at the time billed as a revolution in language teaching. It was echoed in Stephen Krashen's model that stressed comprehensible input as crucial in teaching a language successfully. How much time do you think should be devoted to comprehension (listening, reading) in a foreign language class? What difference might the students' level of proficiency make in determining how much time to spend on comprehension and production?

## 4. First language acquisition insights applied to language teaching

Language pedagogy did not receive much attention from systematic research until about the beginning of the twentieth century. Interestingly, the first instances in this "modern" era of research on language teaching drew their insights from *children* learning first and second languages! If you turn your clock back about a hundred years, you will happen upon two revolutionaries in language pedagogy, **Francois Gouin** and **Maximilian Berlitz**. Their perceptive observations about language teaching helped set the stage for the development of language teaching methodologies for the century following.

In his *The Art of Learning and Studying Foreign Languages*, Francois Gouin (1880), described a painful set of experiences that finally led to his insights about language teaching. Having decided in midlife to learn German, he took up residency in Hamburg for one year.

But rather than attempting to converse with the natives, he engaged in a rather bizarre sequence of attempts to "master" the language. Upon arrival in Hamburg he felt he should memorize a German grammar immediately. A generation later it came to be known as the Direct Method.

The basic premise of Berlitz's method was that second language learning should be more like first language learning: active oral interaction, spontaneous use of the language, no translation between first and second languages, and little or no analysis of grammatical rules. Richards and Rodgers (2001, p. 12) summarized the principles of the Direct Method:

1. Classroom instruction was conducted exclusively in the target language.
2. Only everyday vocabulary and sentences were taught.
3. Oral communication skills were built up in a carefully graded progression organized around question-and-answer exchanges between teachers and students in small, intensive classes.
4. Grammar was taught inductively.
5. New teaching points were introduced orally.
6. Concrete vocabulary was taught through demonstration, objects, and pictures; abstract vocabulary was taught by association of ideas.
7. Both speech and listening comprehension were taught.
8. Correct pronunciation and grammar were emphasized

The Direct Method enjoyed considerable popularity through the end of the nineteenth century and well into the twentieth. It was most widely accepted in private language schools where students were highly motivated and where native-speaking teachers could be employed. To this day, "Berlitz" is a household word: Berlitz language schools are thriving in every country of the world. But almost any "method" can succeed when clients are willing to pay high prices for small classes, individual attention, and intensive study. The Direct Method did not take well in public education, where the constraints of budget, classroom size, time, and teacher background made the method difficult to use. Moreover, the Direct Method was criticized for its weak theoretical foundations.

By the end of the first quarter of the twentieth century, the use of the Direct Method had declined both in Europe and in the United States. Most language curricula returned to the Grammar Translation Method or to a "reading approach" that emphasized reading skills in foreign languages. But it is interesting that in the middle of the twentieth century, the Direct Method was revived and redirected into what was probably the most visible of all language teaching "revolutions" in the modern era, the Audiolingual Method. So even this somewhat short-lived movement in language teaching would reappear in the changing winds and shifting sands of history

Gouin's experience: In the course of the year in Germany, Gouin memorized books, translated Goethe and Schiller, and even memorized 30,000 words in a German dictionary, all in the isolation of his room, only to be crushed by failure to understand German afterward. Only once did he try to "make conversation" as a method, but because this caused people to laugh at him, he was too embarrassed to continue. At the end of the year, having reduced the Classical Method to absurdity, Gouin was forced to return home, a failure.

But there was a happy ending. Upon returning home Gouin discovered that his three-year-old nephew had, during that year, gone through that wonderful stage of *first* language acquisition in which he went from saying virtually nothing to becoming a chatterbox of French. How was it that this little child succeeded so easily in a task, mastering a first language, that Gouin, in a second language, had found impossible? The child must hold the secret to learning a language! Gouin decided to spend a great deal of time observing his nephew and other children and came to the following conclusions: Language learning is primarily a matter of transforming perceptions into conceptions. Children use language to represent their conceptions. Language is a means of thinking, of representing the world to oneself. (These insights, remember, were formed by a language teacher more than a century ago!)

So Gouin set about devising a teaching method that would follow from these insights. And thus the **Series Method** was created, a method that taught learners directly (without translation) and conceptually (without grammatical rules and explanations) a "series" of

connected sentences that are easy to perceive. The first lesson of a foreign language would thus teach the following series of 15 sentences:

*I walk toward the door. I draw near to the door. I draw nearer to the door. I get to the door. I stop at the door. I stretch out my arm. I take hold of the handle. I turn the handle. I open the door. I pull the door. The door moves. The door turns on its hinges. The door turns and turns. I open the door wide, I let go of the handle.*

The 15 sentences have an unconventionally large number of grammatical properties, vocabulary items, word orders, and complexity. Gouin was successful with such lessons because the language was so easily understood, stored, recalled, and related to reality.

### **Summary**

Of the three approaches, the behaviorist approach, which places primary weight on children imitating what they have heard, has proven least adequate for explaining observed facts in child language development. The innatist view, in contrast, places primary weight on the child, and particularly on innate, biological mechanisms to account for language acquisition. The interactionist perspective, acknowledging both the child's role and that of caregivers in the social environment, emphasizes the importance of social interactions aimed at communication as the essential ingredient in language acquisition. To the extent that more research is needed on both the biological and social mechanisms in language acquisition and use, innatists and interactionists are likely to add important information to the overall understanding of language acquisition now and in the future.

### **CLASSROOM CONNECTIONS**

**Research Findings:** Evidence of young children's production of "telegraphic" utterances of two and three word sentences appears to be universal. The language of children at the subsequent ages of 3,4,5, and even older (like the sentence, "Erase the window") brings a smile to adults' faces. All of this is a product of children's "creative construction" of language.

**Teaching Implications:** Adult learners of a second language are creative, but perhaps not in quite the same way. Telegraphic utterances seem to be the product of the intellectual maturation of children, and such childlike forms don't often appear in adults' language. But

phonological, grammatical, lexical, and semantic creativity is quite evident. Consider English learners who have said: "I'm happy to get this burden out of my chest." "I like the [language learning] strategy of reproduction with a partner." "My lack of English is very frustrating to me." What examples of such creativity have your students shown in their learning? How do you respond to them?

*Tasks:*

1. In a group, recall experiences learning a foreign language at some point in your past. Share with others any examples of your comprehension exceeding your production abilities. How about the reverse? Share your findings with the rest of the class.

2. In what way do you think Gouin reflected some ideas about language and about language acquisition that are now current more than a hundred years later? Would the Series Method or the Direct Method work for you as a teacher? Discuss pros and cons.

## THEME 4: SECOND LANGUAGE ACQUISITION THEORIES

1. Theories of SLA.
2. Behaviorist perspective in SLA.
3. Innatist perspective in SLA.
4. Krashen's Five Hypotheses.
5. Interactionist perspective in SLA.

*Task:* Think about your own L1 and L2(s). What aspects do you think you transfer from your L1 to your L2? Lexicon? Grammar? Pronunciation? Can you think of a specific example?

Theories about how people learn to speak a second (or third or fourth) language are directly related to the first language acquisition theories described previously. There are two reasons why. First of all, because first language acquisition is a universal achievement of children the world over, researchers and educators interested in second language acquisition and teaching have often used first language acquisition as an ideal model, one that may inform us about how a second language might be taught.

Until Chomsky, however, ideas about how a first language was acquired were not fully developed and researched. With the advent of Chomskyan linguistics a whole generation of psycholinguists was inspired to go out and tape record the speech of infants and young children to analyze and describe the process of acquiring their mother tongue. The focus of the research was to describe the grammatical development of young children. Chomsky's contribution to the study of child language was his new way of looking at syntax. Researchers applied his methods of describing syntax to the problem of describing children's interim grammars at different ages and stages of language development. As a result, a remarkable amount of information was generated about first language acquisition in languages as diverse as Turkish, Spanish, and Japanese. This information provided a natural resource for second language acquisition researchers, not only in terms of theory, data collection, and data analysis, but also in terms of framing the research questions themselves.

One of the first questions was simply: *Is a second language acquired in the same way as the first? If so, what are the implications for classroom instruction?*

*Because first language acquisition is so successfully accomplished, should teachers replicate its conditions to promote second language acquisition? If so, how?*

These questions are not fully answered yet but remain pertinent today.

Even as information began to accumulate from the study of child language, however, behaviorist views predominated in educational practice, heavily influencing methods of second language teaching in schools, emphasizing drill and practice of grammatical forms and sentence structures. Meanwhile, as researchers began to go into people's homes to tape record children's speech, the impact of the social environment in various cultural milieus emerged as an interesting variable in language acquisition and use. Sociologists and anthropologists were ready to combine their interests and insights about culture and language to inform what became the interactionist viewpoint on language acquisition.

The study of first language acquisition has now emerged as a necessarily interdisciplinary field involving anthropology, psychology, education, and linguistics. As you can imagine, careful attention to social and cultural conventions is essential in investigating how a second language is learned, given the intimate connections between language and culture.

Next, we will introduce you to how second language acquisition is described and explained from the three perspectives examined for first language acquisition: behaviorist, innatist, and interactionist. We will also discuss their implications for teaching, and then offer a picture of our own understandings of second language acquisition in classrooms.

## **2.Behaviorist perspective in SLA**

Behaviorist theories of language acquisition have influenced second language teaching in a number of ways that persist today in many classrooms. If you have taken a foreign language in high school or college, you are probably familiar with the methods informed by

behaviorist learning theories. One behaviorist language teaching method popular in the 1960s is the audiolingual method, in which dialogues are presented on tape for students to memorize, followed by pattern drills for practicing verb forms and sentence structures. Students are first taught to listen and speak and then to read and write based on the assumption that this is the natural sequence in first language acquisition. For behaviorists, the processes involved in second or foreign language learning consisted of imitation, repetition, and reinforcement of grammatical structures. Errors were to be corrected immediately to avoid forming bad habits that would be difficult to overcome later. If you were taught with this method, you may remember the drill-and-skill practice, often carried out via audiotapes in a language laboratory. How well did this instruction work for you? When we ask our students this question in classes of 40 or so, only 1 or 2 report successful foreign language competence acquired through the audiolingual approach.

## **2. Innatist perspective in SLA**

Just as Chomsky's theories inspired psycholinguists to record and describe the developing grammars of young first language learners, they also influenced research on second language learning. One such theory put forth to account for second language development was the **creative construction theory** (Dulay, Burt, & Krashen, 1982).

In a large scale study of Spanish-speaking and Chinese-speaking children learning English in school (Dulay & Burt, 1974), English language samples were collected using a structured interview based on colorful cartoon pictures. Children were asked questions about the pictures in ways that elicited the use of certain grammatical structures. Children's grammatical errors were then examined to determine whether they could be attributed to influence from the first language or whether they were similar to the types of errors young, native English-speaking children make. Data analysis showed that the majority of errors were similar to those made by native English-speaking youngsters as they acquire their mother tongue.

Based on these results, the authors proposed that English language learners creatively construct the rules of the second language in a manner similar to that observed in first language acquisition. Dulay and Burt therefore concluded that second language acquisition is similar to first language acquisition.



Dulay and Burt (1974) also used their findings to refute the hypothesis that learner errors will generally be predictable from a contrastive analysis of the learner's mother tongue and the developing second language. Contrastive analysis is a procedure for comparing phonological, morphological, and syntactic rules of two languages (the learner's mother tongue and his or her second language) to predict areas of difficulty in second language development. For example, Spanish creates the plural by adding an -s or -es ending to a noun (e.g., *casa*, *casas*; *lápiz*, *lápices*). This rule is similar to English pluralization. Thus by contrastive analysis, it would be predicted that plurals in English will not be difficult for native Spanish speakers to learn. When the rules of two languages are quite different, contrastive analysis predicts learner difficulty.

Although predictions based on contrastive analysis sometimes held true in their data analysis, Dulay and Burt found that most English language learner errors among their subjects were best described as similar to errors made by children acquiring English as a first language.

### **3. Krashen's Five Hypotheses**

Continuing in the innatist tradition, Stephen Krashen (1982) developed a series of hypotheses about second language acquisition that have taken root in the field of second language teaching due in part to Krashen's desire to address classroom second language learning. Krashen's five hypotheses are: (1) the acquisition-learning hypothesis, (2) the monitor hypothesis, (3) the natural order hypothesis, (4) the input hypothesis, and (5) the affective filter hypothesis. Each of these is discussed here.

*The Acquisition-Learning Hypothesis.* One of Krashen's first assertions was that there is a distinct difference between acquiring and learning a second language. Acquisition, Krashen asserts, is a natural language development process that occurs when the target language is used in meaningful interactions with native speakers, in a manner similar to first language acquisition—with no particular attention to form. Language learning, in contrast, refers to the

formal and conscious study of language forms and functions as explicitly taught in foreign language classrooms.

Krashen goes on to make two claims about the acquisition-learning distinction that have generated considerable controversy in the academic community: (1) that learning cannot turn into acquisition, and (2) that it is only acquired language that is available for natural, fluent communication. Krashen's critics have pointed out that it would be extremely difficult, if not impossible, to detect which system, acquisition or learning, is at work in any instance of language use (McLaughlin, 1987). Furthermore, the two terms require much finer definition to be subjected to experimental study. These criticisms notwithstanding, Krashen's emphasis on second language acquisition by using the new language for relevant communicative purposes has had substantial, positive influence on classroom practice, especially in regard to the move away from the drill-and-practice pattern aimed at language learning.

*The Monitor Hypothesis.* Krashen has suggested that the formal study of language leads to the development of an internal grammar editor or monitor. As the student produces sentences, the monitor "watches" the output to ensure correct usage. For a student to use the monitor three conditions are necessary: sufficient time, focus on grammatical form, and explicit knowledge of the rules. Thus it is easier to use the monitor for writing than for speaking. Krashen maintains that knowing the rules only helps learners polish their language. The true base of their language knowledge is only that which has been acquired. From this assumption, he recommends that the focus of language teaching should be communication, not rote rule learning, placing him in agreement with many second language acquisition and foreign language teaching experts (cf. Celce- Murcia, 1991; Oller, 1993).

*The Natural Order Hypothesis.* According to the natural order hypothesis, language learners acquire (rather than learn) the rules of a language in a predictable sequence. That is, certain grammatical features, or morphemes, tend to be acquired early, whereas others tend to be acquired late.

A considerable number of morpheme studies support the general existence of a natural order of acquisition of English grammatical features by child and adult non-native English

learners. However, individual variations exist, as do variations that may result from primary language influence (Lightbown & Spada, 1993; Pica, 1994).

*The Input Hypothesis.* Central to Krashen's view of second language acquisition is the input hypothesis. According to the input hypothesis, the acquisition of a second language is the direct result of learners' understanding the target language in natural communication situations. A key element of the input hypothesis is that the input language must not only be understandable, thus the term **comprehensible input**, but should contain grammatical structures that are just a bit beyond the acquirer's current level of second language development (abbreviated as  $i + 1$ , with  $i$  standing for input and  $+1$  indicating the challenging level that is a bit beyond the learner's current level of proficiency).

Krashen suggests that acquirers are able to understand this challenging level of language input by using context, extralinguistic information such as gestures and pictures, and general background knowledge. In other words, input can be made comprehensible as a result of these extra cues. Moreover, acquisition is facilitated by a focus on communication and not grammatical form.

<b>English morphemes acquired early:</b>
-ing: Verb ending John is going to work.
-s/: Plural Two cats are fighting.
<b>English morphemes acquired late:</b>
-s/: Possessive We saw Jane's house.
-s/: Third person singular Roy rides Trigger.

**Table 4.1. ACQUISITION OF ENGLISH MORPHEMES**

In summary, according to Krashen, language is acquired (not learned) by understanding input that contains linguistic structures that are just beyond the acquirer's current level of competence ( $i - 1$ ). Speech is not taught directly but emerges on its own. Early speech is typically not grammatically accurate. If input is understood and there is enough of it,  $i - 1$  is automatically provided. According to Krashen, we do not have to deliberately program

grammatical structures into the input. Although Krashen's theory is particularly concerned with the grammatical structures contained in the input, vocabulary is also an important element in *i* \_ 1. Krashen emphasizes free-choice reading on topics of interest to students as an excellent way to acquire both vocabulary and other aspects of language.

*The Affective Filter Hypothesis.* Krashen's fifth hypothesis addresses affective or social-emotional variables related to second language acquisition. Krashen concludes that the most important affective variables favoring second language acquisition are a low-anxiety learning environment, student motivation to learn the language, self-confidence, and self-esteem.

Krashen summarizes the five hypotheses in a single claim: "People acquire second languages when they obtain comprehensible input and when their affective filters are low enough to allow the input in [to the language acquisition device]" (Krashen, 1981a, p. 62). For Krashen, then, comprehensible input is the causative variable in second language acquisition. In other words, listening to and understanding spoken language is the essential ingredient in second language acquisition. For this reason, Krashen urges teachers not to force production, but rather to allow students a **silent period** during which they can acquire some language knowledge by listening and understanding, as opposed to learning it through meaningless rote drills.

In summary, Krashen's second language acquisition theories have been influential in promoting language teaching practices that (1) focus on communication, not grammatical form; (2) allow students a silent period, rather than forcing immediate speech production; and (3) create a low-anxiety environment. His notion of comprehensible input provides a theoretical cornerstone for sheltered instruction, or specially designed academic instruction in English (SDAIE). These practices have benefited students in many ways.

More questionable theoretically, however, are his acquisition/learning distinction and the notion that comprehensible input alone accounts for language acquisition. The importance of output, that is, speaking and writing, cannot be ignored in a balanced view of language

acquisition (Swain, 1985). Finally, evidence indicates that some grammatical forms may not develop without explicit instruction (Harley, Allen, Cummins, & Swain, 1990).

#### **4. Interactionist perspective in SLA**

The idea that comprehensible input is necessary for second language acquisition also forms a basic tenet of the interactionist position. However, interactionists view the communicative give and take of natural conversations between native and non-native speakers as the crucial element of the language acquisition process (Long & Porter, 1985). Their focus is on the ways in which native speakers modify their speech to try to make themselves understood by English-learning conversational partners. Interactionists are also interested in how non-native speakers use their knowledge of the new language to get their ideas across and to achieve their communicative goals. This trial-and-error process of give-and-take in communication as people try to understand and be understood is referred to as the **negotiation of meaning**. As meaning is negotiated, non-native speakers are actually able to exert some control over the communication process during conversations, thereby causing their partners to provide input that is more comprehensible. They do this by asking for repetitions, indicating they don't understand, or responding in a way that shows they did not understand. The listener's natural response is then to paraphrase or perhaps use some other cue to convey meaning, such as gesturing, drawing, or modified speech (sometimes referred to as "**foreigner talk**," which is somewhat analogous to caregiver speech in first language acquisition).

In addition to the importance placed on social interaction, some researchers have looked more closely at output, or the speech produced by English language learners, as an important variable in the overall language acquisition process (Swain, 1985). We have seen that the language learner's output can serve to elicit modification of input from conversational partners to make it more comprehensible.

#### **Beyond Social Interaction in Second Language Acquisition Theory**

Social interaction with native speakers represents an important theoretical cornerstone in explaining second language acquisition. However, placing second language learners and native speakers in a room together does not in itself guarantee social interaction or language acquisition. We also need to look closely at the larger social and political contexts in which our students live and learn because they can affect relationships between native speakers and English learners. Who are the native speakers? Who are the English learners? Are the two groups from the same social class or not? Are they from the same ethnic group or not? Will the two groups want to interact with each other? To what extent will particular English learners choose to interact with particular native English speakers and adopt their ways of speaking? How will English learners cross the linguistic, social and cultural boundaries needed to participate socially among native speakers?

Stereotypes, prejudices, and status and power differences may make interaction difficult. Furthermore, natural tendencies to affiliate with one's own linguistic, social, and ethnic group (Sheets & Hollins, 1999) may also work against the kind of social interaction that facilitates language acquisition. Two-way immersion programs represent one of the few educational alternatives that explicitly promote equal status between language minority and language majority students, with both groups learning the native language of the other while developing full bilingualism and biliteracy. Even in multilingual classrooms, however, you are in a position to promote positive social participation through heterogeneous grouping. To the extent that linguistically, culturally, and academically diverse students are able to work together to accomplish learning tasks, thinking through procedures and problems as a group, they create the moment-to-moment sharing of linguistic and cognitive resources that can lead to not only academic learning, but also respect and rapport among each other (Gutierrez, Baquedano-Lopez, & Alvarez, 2001).

## ***TASKS FOR SEMINARS 3, 4. SECOND LANGUAGE ACQUISITION THEORIES***

Topics for discussion:

1. Theories of SLA.
2. Behaviorist perspective in SLA.
3. Innatist perspective in SLA.
4. Krashen's Five Hypotheses.
5. Interactionist perspective in SLA.

*Activity: Sharing Your Experiences Learning a New Language*

1.If you have studied or acquired another language, share your language learning story with the group. Using the stories, discuss the effects on second language acquisition of differences, such as age, culture, and language learning situation, and opportunities to use the new language with native speakers.

2.Reflecting further, what do you recall as the hardest part? Why was it hard? What was easy? Why was it easy? How proficient did you become?

What affected your degree of proficiency? Can you identify a theory underlying the teaching approach (e.g., behaviorist, innatist, interactionist)?

3. After reading this chapter, which language acquisition theory do you favor? Or do you favor a combination of the different views? Do you think any one theory seems to account for all the variables in language acquisition? Discuss these issues with someone else who has read the chapter.

4. (I) Prepare a table presenting theories in second language acquisition. In three columns write about their main representatives, typical themes, implications for language teaching.

<i>representatives</i>	<i>typical themes</i>	<i>implications for language teaching</i>

5. (G) Assume roles of advocates of the different theories of L1 and L2 acquisition discussed in the lecture. First discuss in groups and then present your views related to the problems of

language acquisition and language teaching. Point to the weak points in the stance of the rival theory.

6. Taking each of the language acquisition theories in turn—that is, behaviorist, innatist, and interactionist—think of how each view might help you organize your classroom for maximum language learning. Compare and contrast each of the views in terms of a classroom context. For example, look at Table 2.2, which delineates the different theories, and determine what a classroom that strictly followed one theory might be like: Would desks be in rows or circles? Would the teacher always be in the front of the class or moving around the class most of the time? Would students have many choices of classroom activities or would the teacher determine almost all lessons? Finally, describe what theory or combination of theories accounts for the kind of classroom you think is ideal for second language learners with varying degrees of English language proficiency.

7. The following are parts of Krashen’s various hypotheses. Respond to the following:

**Hypothesis 1:** Do you agree that, because there may be a difference between learning in a classroom and acquisition outside a classroom, learners learn in two very distinct ways? A student once said: “If this is true and you have learned French in a classroom and go to France, then it won’t help you.” Is this a logical conclusion—that is, one that can be drawn from the distinction between acquisition and learning? Why or why not?

**Hypothesis 2:** Do you agree that, if a learner tends to monitor his or her own form, doing so gets in the way of acquiring language? Integrate into your answer the concept of speed—that is, the idea that the monitor cannot be used at all times because of the speed of speech.

**Hypothesis 3:** Do you agree that one acquires all forms in a second language in a particular order, regardless of the input? Discuss this in terms of the three conditions of *time, focus on form, and know the rules*.

Video Krashen S. <https://englishpost.org/language-acquisition/> (15 minutes!)

Literature:

Klein W. (2014). Second language acquisition. CUP. (Chapter 2, p.51-57).



## **MODULE 2: THE LINGUISTICS OF SECOND LANGUAGE ACQUISITION**

### **THEME 5: THE DEVELOPMENT OF A SECOND LANGUAGE**

1. Order of acquisition, sequence of acquisition, and usage-based accounts of L2 development.
2. Case studies of L2 learners development.
3. Findings of studies of L2 learners' development.
4. Learner varieties in SL acquisition.
5. Development of other linguistics systems.
  - 5.1. Acquisition of L2 phonology.
  - 5.2. Development of the L2 lexicon.
6. The interconnectedness of different L2 systems.

#### **Introduction**

**Interlanguage** is the mental system of a second language (L2) that a learner constructs and that is different from the target language system.

We can talk about 'an interlanguage' to refer to the system that a learner has constructed at a particular point of time or as a continuum; the research that has investigated interlanguage has focused on how learners acquire the grammar of a second language, but there have also been studies of the acquisition of pronunciation, vocabulary, and pragmatic features (for example, requests and apologies).

We will begin by considering the methods researchers have used to investigate interlanguage development and then go on to examine what the research has shown about the nature of L2 development. A key issue in this lecture is whether it is possible to identify a 'natural route' that is common to all learners of a second language.

#### **1. Order of acquisition, sequence of acquisition, and usage-based accounts of L2 development**

When we talk about interlanguage development we are necessarily concerned with ‘change’ (i.e. how a learner’s interlanguage is modified over time). A key issue, however, is how this ‘change’ is conceptualized. We will consider three ways of looking at this—in terms of the ‘order of acquisition’, ‘sequence of acquisition’, and the more recent usage-based accounts of ‘learning trajectory’.

### **Order of acquisition**

To determine the **order of acquisition** it is necessary to investigate when learners achieve mastery of different linguistic or pragmatic features. Mastery is defined in terms of the learner’s ability to produce specific grammatical forms accurately (i.e. in accordance with target language norms). As native speakers do not typically achieve 100% accuracy all the time, especially when speaking, researchers have taken the 80% or 90% criterion level as indicating mastery (i.e. if learners use a specific feature accurately at least 80% of the time they are considered to have mastered it).

The ideal way to investigate order of acquisition is in longitudinal studies which show when learners reach the 80% criterion level for different linguistic features. However, many studies have been cross-sectional (i.e. they collect samples of learner language at just one time) and determine the order of acquisition by equating it with the **accuracy order**. However, there are reasons for believing that accuracy order may not be a valid way of investigating acquisition order. Much of the SLA research—both old and more recent—has investigated interlanguage development in terms of **accuracy**.

The early studies of acquisition order conducted during the 1970s examined a miscellaneous set of English morphemes (for example, verb + *-ing*, plural *-s*, articles, and regular and irregular past tense). Later studies focused on specific grammatical systems, such as verb tenses.

### *The morpheme studies*

The L2 **morpheme studies** borrowed the methodology used to study how children acquire the grammar of their first language. These studies showed that L1 acquisition involved a relatively clearly defined order of acquisition. Brown (1973), for example, reported a

longitudinal study of three children learning English as their mother tongue. He showed that grammatical morphemes were mastered by all three children in the same fixed order.

The key finding of the early L2 cross-sectional morpheme studies was that learners demonstrated a very similar accuracy order, irrespective of whether they were children or adults and irrespective of their first language. Dulay and Burt (1973, 1974) investigated Spanish and Chinese children learning L2 English. They found that the accuracy order for a mixed group of English morphemes was the same for both groups of learners.

On the assumption that accuracy order reflects the acquisition order, it was proposed that there was a natural order of acquisition which all learners followed. The existence of this 'natural order' has assumed an almost mythical status in SLA.

There is, however, considerable evidence to suggest that the order is not as fixed as it was once assumed. Pica's (1983) study of naturalistic, instructed, and mixed learners of English found that although the accuracy orders in all three groups of learners were the same, there were differences among the groups in specific morphemes. The instructed group used plural *-s* more accurately than the naturalistic group, while the naturalistic group was more accurate than the instructed group in using verb + *-ing*, suggesting that the linguistic environment had some influence on how and when these features were acquired.

Both the learning environment and the learners' first language influence the order of acquisition. Nevertheless, it is clear that some English grammatical morphemes are inherently more difficult for L2 learners to acquire than others.

Goldschneider and DeKeyser (2001) examined some 20 morpheme studies in order to investigate whether a number of different factors could account for the order. They concluded that there was a single general factor that could explain the order of acquisition—'**salience**'. In other words, learners first learn those morphemes whose meanings are transparent and whose form is readily discernible in the input.

It is reasonable to suppose that the learning environment and the learner's first language will have some impact on which features are salient to learners. Verb + *-ing* may be overused

by classroom learners because of its high frequency in language instruction. Plural *-s* may lack saliency to Japanese learners because there is no equivalent feature in their first language.

### **Sequence of acquisition**

An alternative is to investigate the **sequence of acquisition**. Both syntactic features (for example, negation) and morphological features (for example, English regular past tense) are acquired gradually, with learners passing through a number of stages of development. Thus, development is determined not in terms of target-like accuracy, but in terms of whether there is evidence of the learner progressing from an early stage to a later one.

This requires undertaking a **frequency analysis**. Ellis and Barkhuizen (2005) provide a detailed account of this type of analysis. It involves selecting a specific linguistic feature for study (for example, negatives) and then identifying occasions when learners attempt to use this feature and documenting the various linguistic devices they employ and how these change over time. Such analyses can show how learners shift from the predominant use of one device at one time (for example, negative + verb as in ‘\*No coming today’) to the use of another at another time (for example, ‘don’t’ + verb as in ‘\*I don’t coming today’). The advantage of investigating sequence of acquisition is that it can show that development is taking place even if the learner has not achieved target-like use.

### **Usage-based accounts of learning**

Frequency analysis is not without problems. One is the phenomenon of formulaic speech. Learner language, especially in the early stages, is characterized by the use of **formulaic sequences** such as ‘I don’t understand’ and ‘I don’t know’. Such chunks appear to show that the learner has reached a relatively late stage in the development of negation, but in fact they show nothing of the kind because the learner has simply learned some fixed lexical units. For this reason, researchers investigating the sequence of acquisition only examine learners’ creative speech (i.e. utterances that have been constructed out of separate linguistic

units). The problem here is that it is not always easy to tell whether an utterance constitutes a chunk or has been creatively constructed.

## 2. Case studies of L2 learners' development

The case studies considered involved the analysis of oral data collected from learners over a lengthy period of time (more than a year).

### *Schmidt's (1983) study of Wes*

*Wes was a 33-year-old Japanese learner of L2 English who left school at the age of fifteen and thus had had very little experience of formal instruction. He was a successful artist. He divided his time between living in Hawaii and Japan, spending increasing amounts of time in the former. He mixed predominantly with English speakers in Hawaii and thus experienced very little social distance from native speakers of English. Data were collected over a three year period mainly by means of one-hour tape-recorded monologues where Wes commented on his business, his daily activities, and his visits back to Japan. Schmidt also made recordings of informal conversations between Wes and native speakers.*

The focus of Schmidt's study was the extent to which Wes's acculturation to American society could explain his development of **communicative competence**. Communicative competence was considered in terms of four components: (1) linguistic competence (i.e. the ability to use grammatical structures with target-like accuracy); (2) **sociolinguistic competence** (i.e. the ability to use language in socially appropriate ways); (3) **discourse competence** (i.e. the ability to participate in coherent and cohesive conversations); and (4) **strategic competence** (i.e. the ability to deal with communication breakdown) as in Canale (1983).

Schmidt's main finding was that development of these abilities proceeded separately. Wes's **linguistic competence** remained quite limited. His pronunciation was good (especially his intonation), but his grammar hardly developed over the three-year period. Of the nine grammatical morphemes Schmidt investigated, only three reached the 90 per cent criterion level of accuracy. There was greater evidence of development in his **sociolinguistic**

**competence.** For example, initially Wes's directives relied extensively on formulaic expressions (for example, 'Can I have a ...?'), but by the end of the three-year period, gross errors in his use of directives had been eliminated and his English utterances were largely socially appropriate although sometimes idiosyncratic. The aspect that showed the greatest development was Wes's **discourse competence.** Wes also manifested considerable **strategic competence.** For example, he was able to repair communication breakdowns by making effective use of communication strategies such as paraphrase (for example, his use of 'money-girl' for 'prostitute'). However, he rarely bothered to repair his utterances when he received feedback and seemed to operate on the principle that it was the responsibility of native speakers to understand him rather than his responsibility to make himself understood. Overall, Wes proved to be an effective communicator but a poor learner in terms of linguistic development.

Schmidt's study was notable in two principal ways. First it showed the partial independence of grammatical competence from other aspects of communicative competence. Second, the lack of linguistic development could not be explained by Wes's failure to acculturate as in fact he became socially very integrated when he lived in Hawaii. One possible explanation is that, as a functionally oriented learner Wes paid little attention to the input he was exposed to and also developed little metalinguistic awareness of English grammar.

#### *R. Ellis's (1984, 1992) study of two classroom learners*

*Ellis R. investigated classroom rather than naturalistic L2 learners. There were three learners, all children aged ten to 13 years, and all complete beginners at the start of the study. They were learning English in a language centre in an outer suburb of London. The ten-year-old was Portuguese while the other two (a brother and sister) came from Pakistan. He collected data over a two-year period by sitting in their English classes and noting down all the utterances they produced together with contextual information relating to the function and audience of their utterances. He focused on their communicative speech rather than the language they produced in formal practice activities.*

*His initial purpose in conducting these case studies was to examine whether the pattern of development evident in these classroom learners was the same as or different from the*

*pattern reported for naturalistic learners. In other words, he wanted to know whether the instructional setting influenced the way in which the children learned English.*

One of the main findings was that all three children made extensive use of **formulaic sequences** as a means of performing the communicative acts required of them in the classroom, where English served as the medium as well as the object of instruction. Over time, the learners were able to modify and extend these formulas. For example, for the 'I don't know' formula, they substituted other verbs (for example, 'I don't understand'), changed the subject (for example, 'You don't know') and added a constituent (for example, 'I don't know this one'). In other words, the learners were slowly unpacking the formulas, releasing their constituents for creative language use, as well as learning how to combine simple formulas into a more complex whole.

The study also investigated the **sequence of acquisition** for negatives and interrogatives. The developmental profiles for these structures of the three children were very similar to each other and showed a striking similarity to that reported for naturalistic learners. For example, they all began by producing verbless negatives such as 'No pencil' (i.e. 'I don't have a pencil'), before moving on to 'no' + verb negatives (for example, 'No looking my card') and then gradually introducing negatives with auxiliaries, first using 'don't (for example, 'Don't look my card') and then a wider range of auxiliary forms. After two years, however, these learners could still not consistently produce target-like negatives, although the Portuguese boy was clearly more advanced than the two Pakistani learners.

Three main conclusions emerged from the study. First, like Wes, these learners relied initially on formulaic chunks to express their communicative needs and gradually learned how to manipulate the linguistic elements in these chunks to produce more varied, novel utterances. Second, the general pattern of development was very similar to that reported for naturalistic learners, suggesting that the classroom setting did not have a major effect on how these learners' linguistic competence developed. Third, after two years, their development was still

quite limited. They did not consistently produce target-like negatives and they still possessed only a limited range of requesting strategies.

There are two mutually compatible explanations for these developmental limitations. The first is that the classroom setting did not afford the appropriate communicative conditions for acquisition. The other is that L2 development is inevitably a slow and gradual process and that full grammatical and pragmatic competence cannot be acquired even in a two-year period.

### *Jia and Fuse's (2007) study of Chinese ESL learners*

*This was a five-year study that investigated the acquisition of a set of six English grammatical morphemes (regular and irregular past tense, third-person singular - s, verb + -ing, copula be, and auxiliary do). There were ten learners in this study—five girls and five boys who were aged between five and 16 years when they first arrived in the US. They all attended English-speaking schools where 70% of the students were native speakers of English. They all received focused ESL instruction for a period of time.*

*Jia and Fuse divided the learners into two groups—six who were early arrivals and four who were late arrivals. The main aims were to investigate the acquisition trajectories of these features and whether there were any age-related differences.*

Data were collected from the learners by means of language tasks involving story telling prompted by pictures and interviews about the learners' activities in their schools and at home and their language use in various situations. It took place regularly throughout the five years of the study. Obligatory occasions for the six morphemes were identified and the percentage correct calculated. A morpheme was considered to have been mastered if it achieved the 80% criterion level across three consecutive data collection sessions. **Order of acquisition** of the six morphemes was determined in two ways: by examining the number of learners who demonstrated mastery of each morpheme and by calculating the total percentage accuracy of each morpheme for all the learners.

The main findings were as follows. The age of arrival of the learners had no effect on the order of acquisition. The same structures fell into the low-, medium-, and high-accuracy levels for both the early and late arrival groups. The two easiest structures were progressive *-ing* and auxiliary 'do' and the two most difficult were regular past tense and third-person *-s*. However,



there were some age-related effects. For example, at the end of the study, the early arrivals demonstrated greater accuracy than the late arrivals on the two most difficult morphemes. The acquisition trajectories of the morphemes differed markedly. Progressive *-ing* and plural *-s*, for example, showed accelerated learning initially and then levelled off. In contrast, third-person *-s* was acquired slowly but steadily, while regular past tense showed no significant growth over time, but with fluctuations from one point in time to the next.

Jia and Fuse discussed these results in terms of the factors that can account for the same order of acquisition manifested by the ten learners. They concluded that the most likely explanation lay in word frequency and salience; that is, learners learn those features that are more frequent and/or more salient earlier than those features that are less frequent and/or less salient. They also concluded that the results lent no support to the **Critical Period Hypothesis** as there was no evidence of any sharp discontinuity in the early and late arrivals' acquisition of English. They explained the advantage noted for the early arrivals in terms of the richer learning environment they experienced.

### 3. Findings of studies of L2 learners' development

The studies suggest a number of generalizations about how an L2 develops over time:

1. For some learners (for example, Wes), little grammatical development appears to take place. Such learners appear to be functionally-oriented and not motivated to acquire target-language norms.
2. L2 development is uneven. For Wes, development was evident in the sociolinguistic and discourse aspects of the L2 but not in grammar. Jia and Fuse showed that different grammatical features followed different trajectories, some developing steadily over time and others accelerating rapidly to begin with and then plateauing.
3. Grammatical development is not linear; there are notable fluctuations in the accuracy with which grammatical features are used from one time to another.

4. Learners' early attempts to use the L2 are characterized by **structural and semantic simplification**.
5. The studies reported that the learners made extensive use of formulaic expressions to communicate and that these were prevalent in the early stages.
6. Learners appear to acquire grammatical morphemes in a relatively fixed order irrespective of the age of the learners. Jia and Fuse suggested that morphemes that are salient and frequent are acquired earlier than those that are less salient and frequent.
7. There is also evidence of sequences of acquisition; grammatical features—such as negatives—and pragmatic features—such as requests—are acquired gradually in observable stages. This was evident in both the studies that investigated naturalistic acquisition (Jia and Fuse 2007) and the study that investigated classroom learners (Ellis 1984).
8. Considerable differences exist in the rate and success of acquisition by individual learners. Various factors can contribute to this—the learner's first language, the learner's age, and the richness of the learner's learning environment.

In the following sections, we will explore these generalizations in greater depth, beginning with research that has attempted to characterize the principles that underlie the development of **learner varieties**.

#### 4. Learner varieties in SL acquisition

Dimroth (2012) defined a **learner variety** as 'a *coherent linguistic system produced by a language learner*' and emphasized that it is to be seen as a language variety in the same way as a dialect. In other words, a *learner variety constitutes an interlanguage*.

The varieties manifest particular **form-function mappings** and development as driven by the learners' need to communicate more effectively.

The initial variety is the **pre-basic variety**, which is characterized by nominal utterance organization (i.e. there were no verbs). In time, this gives way to the **basic variety**. Utterances

now include verbs, but these are non-finite (i.e. they are not inflected for tense or aspect). It constitutes a much more effective communicative tool than the pre-basic variety—in fact, it proved so effective for one third of the learners that they did not progress to the **post-basic variety** when finite verbal utterance organization finally occurs.

*Table 4.1 Learner varieties*

<b>Learner variety</b>	<b>Linguistic features</b>
<b><i>Pre-basic variety</i></b> — nominal utterance organization	
Small vocabulary (around 50 words)	
Two types of utterance structure:	
1 NP + NP/adj/PP e.g. ‘girl hunger’; ‘Marie old’; ‘man in the street’.	
2 NP + affirmative/negative particle e.g. ‘car no’; ‘bicycle yes’.	
A few adverbs and participles.	
<b><i>Basic variety</i></b> —non-finite verb organization	
Extended lexical repertoire	
Three phrasal patterns:	
1 NP1 + V + (NP2) + (NP2) e.g. ‘he come’; ‘the man eat meal’; ‘the man give girl a present’.	
2 NP1 + copula + NP2/PP/adj e.g. ‘the man is doctor’; ‘he is in the house’; ‘he is tired’.	
3 V + NP2 e.g. ‘finish book’.	
Verbs are not marked for tense or aspect.	
Grammatical categories such as ‘subject’ and ‘object’ do not exist.	
<b><i>Post-basic variety</i></b> —finite verb organization	
Pronominal forms become productive.	
Finite verb forms appear to mark grammatical agreement, tense and aspect.	
Devices for encoding focus occur (e.g. ‘It was the movie John liked best.’).	

It was found that development is similar for both learners of the same and for different second languages. All the learners showed the same progression through the learner varieties.

However, the transition from one variety to the next is not sudden; rather, the utterance structure typical of one variety persists even when a learner has moved on to the next variety.

Also, the source language of the learners was found to play a role. Klein and Perdue (1997) noted that when the target language offers alternative word orders (for example, Dutch and German allow both NP + V + NP and NP + NP + V word orders) the learners opted for the word order that corresponded most closely to their first language (for example, Turkish learners of these languages opted for verb-end in accordance with the word order in Turkish).

Ellis's study (Ellis 1984) suggests that some classroom learners may manifest similar development. In Table 2, examples of the utterances are provided that one of the learners I (the Portuguese boy) produced inside an ESL classroom.

They show that he too seemed to proceed from the pre-basic, to the basic, and then to the post-basic variety in his communicative speech. It is possible, then, that irrespective of setting, learners follow a similar pattern of development when they attempt to use the L2 for communicative purposes.

*Table.2 Examples of the learner varieties in the speech of an L2 classroom learner*

<b>Learner variety</b>	<b>Utterances of an L2 classroom learner</b>
<b><i>Pre-basic variety</i></b>	'Me no ruler.' (= I do not have a ruler.)
	'Phoc no good.' (= Phoc is not a good boy.)
	'We no school.' (= We don't come to school on Monday.)
	'A door no downstairs.' (= There is no door in the downstairs part of the house.)
<b><i>Basic variety</i></b>	'Mariana no coming.' (= Mariana is not coming to school today.)
	'Drawing the picture?' (= Do I have to draw a picture?)
	'Here writing Friday?' (= Do I have to write 'Friday' here?)
	'Playing now bingo?' (= Are we going to play bingo now?)
<b><i>Post-basic variety</i></b>	'You did no read properly.' (criticizing another student)
	'In this one the man is not shouting.' (describing a picture)
	'This man can't read because the light is green.' (describing a picture)

## 5. Development of other linguistics systems

Much of the early work in SLA focused on grammatical development and, as we have seen, interest in this aspect has continued up to today. However, SLA researchers have also investigated how the learner's phonological and lexical systems evolve. We will briefly examine some of the key findings.

### 5.1. Acquisition of L2 phonology

As with grammar, the acquisition of L2 phonology is a gradual, dynamic process but also displays some general tendencies: Learners draw on the phonological features of their first language when speaking in the L2.

However, not all L1-target language phonological differences cause equal difficulty to learners. Some L2 features are 'marked' relative to the learner's first language and so will be difficult to acquire.

*For example, English learners of German have no problem devoicing 'd' in word final position (i.e. they pronounce 'und' correctly as 'unt') whereas German learners of English frequently substitute /t/ for /d/ in this position (i.e. they say 'bet' instead of 'bed'). The explanation according to Eckman (1977) is that the voiceless/voiced distinction in word final position in English is highly marked (i.e. it is only found in a few languages such as English). Thus, English learners of German have no problem with the unmarked devoicing in word final position whereas German learners of English find difficulty with the marked usage.*

Similarities between the first language and the target language do not always benefit the learner (Flege 1987). Beginner learners may incorporate an L1 equivalent feature into their interlanguage but this may prevent them from establishing a completely new phonetic category for the target language and so slow down acquisition. In contrast, learners will need to set up new phonetic categories for those features they perceive as different from their first language and consequently progress more rapidly in acquiring them. In other words, dissimilar sounds can be easier to acquire than similar sounds.

In general, learners' ability to perceive sound contrasts that do not exist in their first language precedes their ability to produce the same contrasts. Over time, as a result of exposure to the target language, learners acquire productive ability although their production of the sound contrasts may not be totally native-like (Hayes-Harb and Matsuda 2008).

## 5.2. Development of the L2 lexicon

L2 learners acquire formulaic chunks (i.e. 'lexical phrases') as well as discrete words. Words and phrases are not stored as discrete items but in structured networks of semantic relations (Meara 2009).

Individual words associate with other words paradigmatically (for example, 'war' associates with 'guns') and syntagmatically (for example, 'war' collocates with 'declare' in the phrase 'declare war'). Thus, to investigate how the L2 lexicon develops it is necessary to consider both the breadth (i.e. how many words the learner knows) and the depth (i.e. how words are interconnected) of the learner's lexicon and how both develop in the direction of the target language lexicon.

### **Generalisations on L2 vocabulary learning:**

1. Receptive knowledge of individual words precedes productive knowledge. Meara (2009) argued that a word becomes available for productive use only when the learner has established connections with other words in the mental lexicon.
2. Development involves not just knowing the meaning of a word and its connections to other words, but of being able to access this knowledge rapidly for both reception and production.
3. Words can be learned incidentally through exposure or intentionally, for example by memorizing lists of words. For **incidental learning** to take place learners need to be able to infer the meaning of a new word from context. Nation (2001) pointed out that this becomes easier the more words the learner knows. Learners need to know 95% of the words in a written text to successfully guess the meanings of the other five per cent. In the case of learning from oral input, however, learners can make use of the situational context as well as the linguistic

context. Multiple exposures to a new word in a variety of different contexts are needed for incidental learning to take place.

4. Lexical units (words or formulaic sequences) that occur frequently in the input will be acquired earlier than those that occur less frequently.

5. N. Ellis (1997) argued that lexical acquisition does not just involve the learning of individual lexemes, but can also take place by segmenting formulaic sequences. For example, by segmenting the formula 'I don't know', the learner discovers that 'I don't' and 'know' constitute separate lexical units which can then be combined with other words in the L2 lexicon. The process can also work the other way round. Learners can construct an utterance from their knowledge of individual words and then store the utterance as a chunk. In this respect, the processes involved in vocabulary and grammar acquisition cannot be easily distinguished.

6. Lexical development can also push grammatical development, providing further evidence of the interplay between the lexical and grammatical systems. As Bell (2009) put it, 'grammatical complexity can be fast forwarded by lexical formulae' (p. 126) as when the acquisition of the formula '*it seems that ...*' prompts the use of embedded clauses.

7. Learners draw on their first language in various ways. Initially, the link between an L2 lexical form and meaning may be indirect via the equivalent first language lexical form (L2 form → L1 form → meaning). Later a direct connection may be made (L2 → meaning). Learners also make use of cognates (i.e. words that are formally the same or similar in their first language and the target language) and sometimes establish false cognates.

It is clear that vocabulary acquisition is not a simple linear process of adding new words to an existing lexicon, but also of adding 'depth' to existing words and incorporating new words into a network of form—meaning connections that grow more complex over time. This process is intimately connected with the development of grammar.

In contrast to research on L2 grammar learning, there have been few longitudinal studies of vocabulary development in either naturalistic or instructed settings. Yoshida's

(1978) longitudinal study of a young Japanese child's acquisition of L2 English reported that nouns were learned before verbs—a characteristic of the pre-basic variety.

Palmberg (1987) reported a longitudinal study of vocabulary growth in Swedish learners of L2 English in a classroom setting. Unsurprisingly, most of the words the learners were able to produce were traceable to the textbook vocabulary. Laufer (1998) examined the development of passive and active vocabulary in adult foreign language learners over one year, reporting that their passive knowledge progressed considerably, but their controlled active knowledge much less so, and their free active vocabulary not at all.

## **6. The interconnectedness of different L2 systems**

In linguistics, grammar, phonology, lexis, and pragmatics are typically treated separately so it is no surprise that SLA researchers have generally adopted the same approach. However, it is clear that these *different linguistic systems are interconnected in L2 development*. Formulaic sequences are lexical, but they play an important role in the development of grammar (Eskildsen, 2012). The acquisition of words necessarily includes acquisition of their grammatical properties (Meara, 2009). The linguistic features of the pre-basic, basic, and postbasic varieties reflect the discourse strategies learners adopt (Klein and Perdue, 1997).

### *Development is gradual, dynamic, variable, and non-linear*

All the research we have examined in this lecture points to the gradual, dynamic, variable, and non-linear nature of L2 development. Learners do not move suddenly from one learner variety to another. Mastery of grammatical morphemes is a slow process and different morphemes are acquired at different rates. Nor does the acquisition of individual morphemes proceed in a straightforward way. There are periods when development is rapid, followed by a plateau, and then further development (Jia and Fuse, 2007). The acquisition of negatives may manifest distinct stages of development, but these stages overlap, resulting in highly variable use of the different negative devices available at any one stage (Cancino et al, 1978).



*Development is characterized by a set of universal processes*

There are differences in how individual learners' interlanguage develops. We have seen that the learner's first language influences development—for example, in the word order that figures in the basic variety (Klein and Perdue 1997) or in the acquisition of voicing in final consonants (Eckman 1977). L2 sociopragmatic competence is heavily influenced by the pragmatic norms of the first language.

However, it is also possible to identify a set of processes that are common to all learners and that suggest that, to some extent at least, **development is systematic and predictable**. These include:

***Analysis of formulaic sequences.*** We have pointed to the role that formulaic sequences play, not just in enhancing learners' communicative ability, but also in contributing to acquisition. Where once formulaic chunks were seen as separate from the rule-systems that learners draw on in their creative speech, they are now seen as feeding into grammatical development as learners discover how to segment and recombine the parts that comprise them.

***Semantic and structural simplification*** (i.e. the omission of content words and grammatical functors, as in 'no colour' (= 'I don't have a coloured pencil'). This is especially prevalent in the early stages of development (in the pre-basic variety), but is also likely to occur whenever learners are under pressure to communicate spontaneously and have had no opportunity to plan.

***Overgeneralization*** (i.e. the extension of a specific linguistic form to a context that does not require it in the target language, for example, 'eated'). Such forms do not occur in the input the learner is exposed to and thus must have been 'created' by the learner.

***Restructuring*** (i.e. the process where the acquisition of a new linguistic feature leads to the reorganization of existing L2 knowledge). The change that takes place does not simply involve the addition of the new feature to the learner's interlanguage, but a qualitative reorganization of it.

*U-shaped behaviour* where a specific linguistic form is target-like initially, but is then replaced by an interlanguage form before the target form finally reappears (for example, ate → eated → ate). U-shaped behaviour has been observed in both the acquisition of grammatical and phonological L2 features.

## **Conclusion**

It is clear that there are regularities in the ways in which all learners approach the task of learning a second language and that these regularities are reflected in the general trajectory observed in L2 development.

Some researchers, however, have questioned the existence of ‘predictable paths’. Larsen-Freeman (2010) wisely warned of the danger of treating all learners as behaving the same and noted that context can also affect development. Lantolf (2005), for example, claimed that ‘development is revolutionary and therefore unpredictable’ and dismissed the view that developmental trajectories are ‘impervious to instructional intervention’ (p. 339).

However, there is far too much evidence of these developmental trajectories to dismiss them so lightly. It is necessary to reconcile the claim that there are universal tendencies in the way a second language is acquired with the variability that is evident in learners’ use of a second language.

## ***TASKS FOR SEMINAR. THE DEVELOPMENT OF A SECOND LANGUAGE***

### **Topics for discussion:**

1. Order of acquisition, sequence of acquisition, and usage-based accounts of L2 development.
2. Case studies of L2 learners development.
3. Findings of studies of L2 learners' development.
4. Learner varieties in SL acquisition.
5. Development of other linguistics systems.
  - 5.1. Acquisition of L2 phonology.
  - 5.2. Development of the L2 lexicon.
6. The interconnectedness of different L2 systems.

**Task 1.** Think of the three approaches to the study of the development of a second language (order of acquisition, sequence of acquisition, and usage-based accounts of L2 development).

Fill out the missing information in the table in terms of their goals, key concepts, methods of investigation, advantages and disadvantages.

	<b>order of acquisition</b>	<b>sequence of acquisition</b>	<b>usage-based accounts</b>
goals			
key concepts			
research methods			
advantages			
disadvantages			

**Task 2.** Summarise the main points of the case studies cited in this lecture, including information on the aims of research, participants, methods employed and main findings:

- Aims
- Participants
- Research methods
- Main findings

**Task 3.** Reflect on the generalized findings of studies of SL development. Which of them were rather unexpected? What implications for teaching can be drawn from them?

**Task 4.** How does the development of the phonological subsystem in the learners' interlanguage take place?

What is likely to cause difficulties for learners? Should considerable difficulties be expected in aspects of phonology which are different in L1 and L2?

**Task 5.** How does the development of the L2 lexicon take place?

- Consider how the words are associated paradigmatically and syntagmatically.
- What is the difference between the depth and breadth in terms of the L2 lexicon acquisition?
- Draw up a table presenting the generalized findings with reference to L2 vocabulary acquisition.

**Task 6.** Prove the fact that different L2 systems (grammar, vocabulary, phonology) are acquired in an interconnected fashion.

**Task 7.** What similar processes are distinguishable in the development of L2? Provide evidence that the process of SLA is systematic and predictable.

## THEME 6: APPROACHES TO THE STUDY OF SLA

1. Early approaches to the study of SLA
  - 1.1. Contrastive Analysis
  - 1.2. Error Analysis
  - 1.3. Interlanguage
2. Recent approaches to the study of SLA
  - 2.1. Universal Grammar
  - 2.2. Linguistic interfaces
  - 2.3. Functional approaches

### 1. Early approaches to SLA

We begin our survey of early approaches with **Contrastive Analysis (CA)**, which predates the establishment in the 1960s of SLA as a field of systematic study. This is an important starting point because aspects of CA procedures are still incorporated in more recent approaches, and because CA introduced a continuing major theme of SLA research: the influence of L1 on L2.

#### 1.1. Contrastive Analysis

**Contrastive Analysis (CA)** is an approach to the study of SLA which involves predicting and explaining learner problems based on a comparison of L1 and L2 to determine similarities and differences.

It was heavily influenced by theories which were dominant in linguistics and psychology within the USA through the 1940s and 1950s, **Structuralism** and **Behaviorism**. The goal of CA (as that of still earlier theories of L2 learning) was primarily pedagogical in nature: to increase efficiency in L2 teaching. Robert Lado states this clearly in his introduction to *Linguistics Across Cultures* (1957), a book which became a classic guide to this approach: The plan of the book rests on the *assumption* that we can predict and describe the patterns that will cause difficulty in learning, and those that will not cause difficulty, by comparing systematically the language and culture to be learned with the native language and culture of the student. (p. vii)

Following notions in behaviorist psychology, early proponents of CA assumed that language acquisition essentially involves habit formation. The implication is that “practice makes perfect.” Another assumption of this theory is that there will be **transfer** in learning: in the case of SLA, this means the transfer of elements acquired (or habituated) in L1 to the target L2. The transfer is called **positive** (or facilitating) when the same structure is appropriate in both languages. The transfer is called **negative** (or **interference**) when the L1 structure is used inappropriately in the L2.

### 1.2.Error Analysis

**Error Analysis (EA)** is the first approach to the study of SLA which focuses on learners’ creative ability to construct language. It is based on the description and analysis of actual learner errors in L2.

The shift in focus from surface forms to underlying rules is attributable to the revolution in linguistics which resulted from Noam Chomsky’s introduction of **Transformational-Generative (TG) Grammar** (1957, 1965). Chomsky claimed that languages have only a small number of essential rules which account for their basic sentence structures, plus a limited set of transformational rules which allow these basic sentences to be modified. The finite number of basic rules and transformations in any language accounts for an infinite number of possible grammatical utterances.

“Knowing” a language was seen as a matter of knowing these rules rather than memorizing surface structures. Since speakers of a language can understand and produce millions of sentences they have never heard before, they cannot merely be imitating what they have heard others say, but must be applying these underlying rules to create novel constructions. Language thus came to be understood as **rule-governed behavior**. Under this influence from linguistics and related developments in psychology, the study of first language acquisition adopted notions that the child is an active and *creative* participant in the process rather than a passive recipient of language “stimuli.” Structures of child language production

began to be described and analyzed as grammatical systems in their own right rather than in terms of how they are “deficient” in comparison to adult norms (Miller 1964 ; McNeil 1966 ). Similar notions began to be applied to the study of second language learning at about the same time, in part to address the issue of how L1 and L2 acquisition processes might be the same or different.

The most influential publication launching **Error Analysis** as an approach in SLA was S. Pit Corder’s ( 1967 ) article on “The significance of learners’ errors,” which calls on applied linguists to focus on L2 learners’ errors not as “bad habits” to be eradicated, but as sources of insight into the learning processes. Errors are windows into the language learner’s mind. In this approach, the state of learner knowledge is seen as **transitional competence** on the path of SLA. Further, Corder claimed that the making of errors is significant because it is part of the learning process itself: “a way the learner has of testing his hypothesis about the nature of the language he is learning.” This includes testing whether aspects of existing L1 knowledge can be used in the L2. Errors are thus a sign that the learner is (perhaps unconsciously) exploring the new system rather than just experiencing “interference” from old habits.

The procedure for analyzing learner errors includes the following steps (Ellis 2008 ):

- **Collection of a sample of learner language** . Most samples of learner language which have been used in EA include data collected from many speakers who are responding to the same kind of task or test. Some studies use samples from a few learners that are collected over a period of weeks, months, or even years in order to determine patterns of change in error occurrence with increasing L2 exposure and proficiency.
- **Identification of errors**. This first step in the analysis requires determination of elements in the sample of learner language which deviate from the **target** L2 in some way. Corder (1967) distinguishes between systematic **errors** (which result from learners’ lack of L2 knowledge) and **mistakes** (the results from some kind of processing failure such as a lapse in memory), which he excludes from the analysis.
- **Description of errors**. For purposes of analysis, errors are usually classified according to language level (whether an error is phonological, morphological, syntactic, etc.), general

linguistic category (e.g. auxiliary system, passive sentences, negative constructions), or more specific linguistic elements (e.g. articles, prepositions, verb forms).

- **Explanation of errors.** Two of the most likely causes of L2 errors are **interlingual** (“between languages”) factors, resulting from negative transfer or **interference** from L1 and **intralingual** (“within language”) factors, not attributable to cross-linguistic influence. Intralingual errors are also considered **developmental** errors and often represent incomplete learning of L2 rules or overgeneralization of them.

- **Evaluation of errors.** This step involves analysis of how “serious” an error is, or to what extent it affects intelligibility, or social acceptability (such as qualifying for a job).

EA continues as a useful procedure for the study of SLA.

### 1.3. Interlanguage

Larry Selinker (1972) introduced the term **Interlanguage (IL)** to refer to the intermediate states (or interim grammars) of a learner’s language as it moves toward the target L2.

Selinker and others considered the development of the IL to be a creative process, driven by inner forces in interaction with environmental factors, and influenced both by L1 and the target language. Here emphasis is on the IL itself as a third language system in its own right which differs from both L1 and L2 during the course of its development.

#### Scope of IL

The beginning and end of IL are defined as whenever a learner first attempts to convey meaning in the L2 and whenever development “permanently” stops, but the boundaries are not entirely clear.



A schematization of the construct is presented in the table above. The initial state and very early stages of L2 development in naturalistic (i.e. unschooled or untutored) settings often involve only isolated L2 words or memorized routines inserted in an L1 structural frame for



some period of time. For example, we recorded the following utterances from children who were just beginning to acquire English (Saville-Troike, Pan, and Dutkova 1995 ): Chinese L1: *Zheige delicious* . ‘This is delicious.’

Navajo L1: *Birthday cake deed, a, a*’ . ‘We ate a birthday cake .’

Czech L1: *Yili sme bowling* . ‘We went bowling .’

IL probably cannot properly be said to begin until there is some evidence of systematic change in grammar. The endpoint of IL is difficult to identify with complete certainty since additional time and different circumstances might always trigger some resumption in learning.

Identification of **fossilization**, or cessation of IL development before reaching target language norms, is even more controversial. Should individuals be considered “fossilized” in L2 development because they retain a foreign accent, for instance, in spite of productive fluency in other aspects of the target language?

*(One thinks of Arnold Schwarzenegger, US motion picture actor and politician, who retains a strong Austrian-German accent, or of many faculty members and students who are identifiably nonnative speakers of English although they speak and write fluently in this language – often even more fluently than many native speakers. There may even be an advantage in retaining a nonnative accent, since “sounding native” may be misinterpreted by native speakers as implying corresponding native social and cultural knowledge.)*

There is also the issue of what the concept of “target language” entails as the goal of SLA, especially as it applies to English usage in parts of the world where English has been adopted as an auxiliary or official language but differs from any native variety in Britain or the USA (see Kachru and Nelson 1996 ). “Native-like” production is neither intended nor desired by many speakers, and assuming that it is or should be the ultimate goal for all L2 learners may be considered somewhat imperialistic.

#### **1.4. Morpheme Order Studies**

One important question in the study of SLA which the concept of IL highlighted during the 1970s is whether there is a natural order (or universal sequence) in the grammatical development of L2 learners. This is interesting because if we find that the same elements of an

L2 are learned first no matter what the learner's L1 is, we might assume that transfer from L1 is less important than if we were to find that the order of acquisition is different for speakers of different native languages. If the same order of acquisition is found in L2 as in children's L1 learning, there is the additional implication that the acquisition processes may be very much the same for all of language development.

Roger Brown (1973) provided the first baseline information on an L1 acquisition sequence by tracking the order in which three children mastered the production of a set of grammatical morphemes in English, including inflections which mark tense on verbs and plural number on nouns. His work was soon validated by studies of larger numbers of English L1 children. The claim that this sequence constituted a **natural order** for English L2 as well as English L1 was first made by Heidi Dulay and Marina Burt, based on studies of children learning English who were native speakers of Spanish and Chinese. A list of morphemes that were included in the Brown (1973) and Dulay and Burt (1974) findings is given in Table 3.1. These results indicate, for example, that the progressive suffix -ing and plural -s are the first of this set of morphemes to be mastered by both L1 and L2 learners of English; the irregular past tense form of verbs and possessive -s are acquired next in sequence for L1, but relatively later for learners of L2 (after forms of be and a/the ).

Although not identical, the order of morpheme acquisition reported was similar in L1 and L2. Further, the order was virtually the same in English L2 whether children were L1 speakers of Spanish or Chinese. The existence of such a "natural order" strengthened claims for internally driven acquisition processes, which Dulay and Burt (1973) labeled **creative construction**. They concluded that L2 learners are neither merely imitating what they hear nor necessarily transferring L1 structures to the new code, but (subconsciously) creating a mental grammar which allows them to interpret and produce utterances they have not heard before.

The concept of **natural order** remains very important for understanding SLA, however, both from linguistic and from cognitive approaches. The morpheme acquisition studies were followed by research which indicated that there are also regular sequences in acquisition of some syntactic constructions by both children and adults (e.g. negation, questions, and relative

clauses). These findings form part of the basis for continuing speculation that innate mechanisms for language acquisition may not be limited to early childhood.

**Table 3.1 English L1 and L2 Morpheme Acquisition Order**

<b>English L1</b>		<b>English L2</b>	
1	Progressive <i>-ing</i>	He is <i>talking</i> .	3
2	Plural <i>-s</i>	There are two cats.	4
3	Past irregular	We <i>ate</i> .	7
4	Possessive <i>-s</i>	The child's toy	8
5	Articles <i>a/the</i>	A sunny day/ <i>The</i> cat	1
6	Past regular <i>-ed</i>	They <i>talked</i> .	6
7	Third person <i>-s</i>	He <i>sings</i> .	9
8	Copula <i>be</i>	He's tall.	2
9	Auxiliary <i>be</i>	She's <i>singing</i> .	5

(A copula is a linking verb. An auxiliary is a helping verb conjoined with the main verb).

The early period for linguistic study of SLA which we have just reviewed ended with some issues in rather spirited debate among proponents of different approaches, but there was widespread consensus on some important points. These include:

- *What* is being acquired in SLA is a “rule-governed” language system.

Development of L2 involves progression through a dynamic interlanguage system which differs from both L1 and L2 in significant respects. The final state of L2 typically differs (more or less) from the native speakers’ system.

- *How* SLA takes place involves creative mental processes. Development of both L1 and L2 follows generally predictable sequences, which suggests that L1 and L2 acquisition processes are similar in significant ways.

- *Why* some learners are more (or less) successful in SLA than others relates primarily to the age of the learner.

## 2. Recent approaches to the study of SLA

As we reach the 1980s in this survey, new proposals in Chomskyan theoretical linguistics were about to have a major impact on the study of SLA, and **Universal Grammar** was to become the dominant approach with an internal focus.

### 2.1. Universal Grammar

**Universal Grammar (UG)** continues the tradition which Chomsky introduced in his earlier work. Two concepts in particular have been of central importance:

(1) What needs to be accounted for in language acquisition is **linguistic competence**, or speaker/hearers' knowledge of language.

This is distinguished from **linguistic performance**, or speaker/hearers' actual use of language in specific instances.

(2) Chomsky and his followers argue that children (at least) come to the task of acquiring a specific language already possessing general knowledge of what all languages have in common. This innate knowledge is in what Chomsky calls the **language faculty**, which is "a component of the human mind, physically represented in the brain and part of the biological endowment of the species" (Chomsky 2002 :1). What all languages have in common is **Universal Grammar**.

One of the most important issues in a UG approach to the study of SLA has been whether this innate resource is still available to individuals who are acquiring additional languages beyond the age of early childhood.

A major change in thinking about the acquisition process occurred with Chomsky's (1981) reconceptualization of UG in a **Principles and Parameters** framework (often called the **Government and Binding [GB]** model), and with his subsequent introduction of the **Minimalist Program** (1995).

### Principles and Parameters

Since around 1980, the construct called **Universal Grammar** has been conceptualized as a set of **principles** which are properties of all languages in the world. Some of these principles contain **parameters**, or points where there is a limited choice of settings depending on which specific language is involved. Because knowledge of principles and parameters is postulated to be innate, children are assumed to be able to interpret and unconsciously analyze the input they receive and construct the appropriate L1 grammar. This analysis and construction is considered to be strictly constrained and channeled by UG, which explains why L1 acquisition for children is relatively rapid and always successful; children never violate core principles nor do they select parametric values outside of the channel imposed by UG, even though there might be other logical possibilities.

An example of an early principle which Chomsky posited stipulates that every phrase in every language has the same elements including a Head: e.g. a noun phrase (NP) must always have a noun head (N), a verb phrase (VP) must always have a verb head (V) etc. The only choice, or parameter setting, that speakers have in different languages is Head Direction, or the position of the head in relation to other elements in the phrase. There are only two possible choices: **head initial or head-final**.

Children who are learning English L1 receive input that lets them know that English generally has a head-initial parameter setting. This is because they hear sentences with the following word order:

a. John [ kicked the ball ] VP (The word order of this VP provides evidence that the English parameter setting is head initial, because the verb kicked comes in front of the ball.

In contrast, children who are learning Japanese L1 receive input that lets them know that Japanese has a head-final parameter setting. They hear sentences with the following word order:

a. John-wa [ booru-wo ketta ] VP (Literally: 'John ball kicked')

This provides evidence that the Japanese parameter setting is headfinal, because the verb ketta 'kicked' comes after booru-wo 'ball' in the VP.

Japanese and English word orders are largely, though not entirely, a “mirror image” of one another. Children acquiring English or Japanese as their L1 need to hear only a limited amount of input to set the parameter for this principle correctly. That parameter setting then presumably guides them in producing the correct word order in an unlimited number of utterances which they have not heard before, since the general principle stipulates that all phrases in a language tend to have essentially the same structure.

## 2.2. Linguistic interfaces

For SLA, the most important recent development within Chomsky’s generative linguistic theory is the application of interface concepts to language learning content, processes, and outcomes. While the primary focus of UG theory and research remains on syntax, attention to **linguistic interfaces** greatly enhances the importance given to different types of meaning: lexical, grammatical, semantic, and pragmatic/discourse (Slabakova 2010 ).

Lexical meaning resides in the words that are stored in our mental dictionaries. When we learn an additional language, some of the words that we acquire are equivalent in meaning to words that we know in our L1, but many are not translation equivalents.

Grammatical meaning is often carried by inflectional morphology, including information about number, gender, tense, and aspect. The form *cats*, for instance, includes the lexical meaning of *cat* plus the grammatical marking of “plural.” Interpreting the meaning of even this small word requires processing a **lexical-morphological interface**.

Semantic meaning at the phrase and sentence levels requires processing the combined lexical and grammatical meanings of all the words in a phrase or sentence plus their order, which is a **syntax-semantics interface**.

While some aspects of these interfaces may be universal and not require learning, others show clear differences between L1 and L2. These may be a significant source of transfer between languages as well as contributors to incomplete second language learning (i.e. fossilization).

### 2.3. Functional approaches

While UG has been the dominant linguistic approach to SLA for many years, many researchers have rather chosen to take an **external** focus on language learning. The more influential of these approaches are based on the framework of **Functionalism**.

**Functional** models of analysis date back to the early twentieth century and have their roots in the Prague School of linguistics that originated in Eastern Europe. They emphasize the information content of utterances, and in considering language as a system of communication rather than as a set of rules.

The term **function** has several meanings in linguistics, including both **structural function** (such as the role which elements of language structure play as a subject or object, or as an actor or goal) and **pragmatic function** (what the use of language can accomplish, such as convey information, control others' behavior, or express emotion). Approaches to SLA which are characterized as **functional** have the following characteristics in general opposition to those in the Chomskyan tradition:

- Focus is on the use of language in real situations (**performance**) as well as underlying knowledge ( **competence** ). No sharp distinction is made between the two.
- Study of SLA begins with the assumption that the purpose of language is communication, and that development of linguistic knowledge (in L1 or L2) requires communicative use.
- Scope of concern goes beyond the sentence to include discourse structure and how language is used in interaction, and to include aspects of communication beyond language (Tomlin 1990).

Four of the functional approaches which have been influential in SLA are **Systemic Linguistics**, **Functional Typology**, **function-to-form mapping**, and **information organization**.

#### Systemic Linguistics

Systemic Linguistics has been developed by M. A. K. Halliday, beginning in the late 1950s. This is a model for analyzing language in terms of the interrelated systems of choices that are

available for expressing meaning. Basic to the approach is the notion that language structures cannot be idealized and studied without taking into account the circumstances of their use, including the extralinguistic social context.

To relate this notion to the question about what language learners essentially acquire, in Halliday's view it is not a system of rules which govern language structure, but rather "meaning potential": "what the speaker/ hearer can (what he can mean, if you like), not what he knows" (1973, p. 346). The process of acquisition consists of "mastering certain basic functions of language and developing a meaning potential for each" (1975, p. 33).

### **Functional Typology**

Another approach within the functional framework is Functional Typology, which is based on the comparative study of a wide range of the world's languages. This study involves the classification of languages and their features into categories (or "types"; hence "typology"), with a major goal being to describe patterns of similarities and differences among them, and to determine which types and patterns occur more/less frequently or are universal in distribution.

Functional Typology has been applied to the study of SLA most fruitfully in accounting for developmental stages of L2 acquisition, for why some L2 constructions are more or less difficult than others for learners to acquire, and for the selectivity of cross-linguistic influence or transfer (i.e. for why some elements of L1 transfer to L2 and some do not).

A particularly important concept which is tied to these accounts is markedness – the notion of markedness deals with whether any specific feature of a language is "marked" or "unmarked." A feature is "unmarked" if it occurs more frequently than a contrasting element in the same category, if it is less complex structurally or conceptually. The concept applies to all levels of linguistic analysis. For example:

- In phonology, the most common syllable structure which occurs in languages of the world is CV (consonant + vowel, as in me and banana), so this structure is "unmarked." It is much less common to have a sequence of consonants at the beginning or end of syllables;



English sequences like street [str i:t] and fence [fɛ nts ] are “marked” in this respect.

- In vocabulary, the preposition in denotes location while the preposition into is more complex, denoting both location and directionality. Into is thus “marked” in contrast with in because it is both structurally and conceptually more complex.
- In syntax, the basic word order in sentences of SVO (subject–verb– object) is more common in languages of the world than is SOV. SVO is thus relatively “unmarked” and SOV relatively “marked.”

In accounting for order and relative difficulty for acquisition, unmarked elements are likely to be acquired before marked ones in children’s L1 (Jakobson 1941 ), and to be easier for a learner to master in L2. In phonology, for instance, the babbling and first words of a child in L1 are likely to have an unmarked CV syllabic structure (no matter what the native language), and marked CC sequences appear only at a later stage of development.

One implication that we might draw from this approach is that some aspects of some languages are more difficult to learn than others, in spite of the traditional claim within linguistics that all languages are equally complex. Another issue that we might speculate about is why some types and patterns of features are more or less frequent than others in both native and second languages. Functional explanations tend to refer to extralinguistic factors, or elements outside of language.

### **Function-to-form mapping**

Another functional approach which has been applied to the description and analysis of interlanguage emphasizes function-to-form mapping in the acquisitional sequence. A basic concept from this perspective is that acquisition of both L1 and L2 involves a process of grammaticalization in which a grammatical function (such as the expression of past time) is first conveyed by shared extralinguistic knowledge and inferencing based on the context of discourse, then by a lexical word (such as yesterday ), and only later by a grammatical marker (such as the suffix -ed ).

For example, if you ask a beginning learner of English what he did the day before he might say I play soccer, relying on context to convey the meaning of past time; a somewhat more advanced learner might say Yesterday I play soccer, using an adverb to convey the meaning of past; and a still more advanced learner might say I played soccer, using the grammatical inflection -ed.

### **Information organization**

Information organization refers to a functional approach which focuses on utterance structure, or “the way in which learners put their words together” (Klein, Perdue, 1993, p. 3). The task of studying SLA from this perspective includes describing the structures of interlanguage (called learner varieties), discovering what organizational principles guide learners’ production at various stages of development, and analyzing how these principles interact with one another.

## ***TASKS FOR SEMINAR: APPROACHES TO THE STUDY OF SLA***

### *Topics for discussion:*

1. Early approaches to the study of SLA
  - 1.1. Contrastive Analysis
  - 1.2. Error Analysis
  - 1.3. Interlanguage
  - 1.4. Monitor Model
2. Recent approaches to the study of SLA
  - 2.1. Universal Grammar
  - 2.2. Linguistic interfaces
  - 2.3. Functional approaches

### *Activities:*

1. Match the following linguistic terms to their corresponding synonyms/ definitions:

- |               |                   |
|---------------|-------------------|
| 1. lexicon    | a. word structure |
| 2. phonology  | b. grammar        |
| 3. morphology | c. vocabulary     |
| 4. syntax     | d. sound system   |

2. Match the following theories with their central figures:

- |                           |                   |
|---------------------------|-------------------|
| 1. Contrastive Analysis   | a. Krashen        |
| 2. Error Analysis         | b. Dulay and Burt |
| 3. Interlanguage          | c. Corder         |
| 4. Morpheme Order Studies | d. Chomsky        |
| 5. Monitor Model          | e. Lado           |
| 6. Universal Grammar      | f. Selinker       |

3. When interlanguage development stops before a learner reaches target language norms, it is called\_\_\_\_\_.

4. As they can be understood in Chomsky's theory of Universal Grammar, what is the difference between linguistic performance and linguistic competence?

5. According to a Functionalist perspective, what is the primary purpose of language?

### *Active learning*

1. Read the following scenarios and decide which aspect of language is mentioned in each instance. (Choose from lexicon, morphology, phonology, and syntax.)

- a. If we see the word *talks* alone, outside of any context, we could consider it to be composed of the root *talk* and a plural *-s* to make a noun (more than one talk/discussion/address), or we could consider it to be made up of the root *talk* and a third person *-s* to make a conjugated verb (like *he talks*, *she talks*, or *it talks*).
- b. The English word *talk* has near synonyms like *speak*, *say*, *express*, *shout*, *yell*, and *whisper*.
- c. The English word *talk* can be pronounced differently depending on the geographical locations of the speakers.
- d. In English, appropriate word order is subject–verb–object, like saying *The man was talking to the child*. In Japanese, word order is subject–object–verb, so one would say ‘The man the child to was talking.’

2. Make a timeline to indicate when the following theories or schools of thought were flourishing as they are discussed in this text. Think about the progression of theories. When they change, are they building upon old theories or rejecting them? Select one theory and explain how it builds upon or rejects those that came before it.

- a. *Contrastive Analysis*
- b. *Behaviorism*
- c. *Structuralism*
- d. *Error Analysis*
- e. *Universal Grammar*
- f. *Interlanguage*
- g. *Monitor model*

3. Listen to someone who speaks your language non-natively and write down some ungrammatical sentences they have spoken.

Using principles of Contrastive Analysis and the procedures of Error Analysis, try to classify each error. Remember that there may not be a specific “right” answer available; these are just your predictions.

4. If you have studied a second language, what are some of the linguistic elements that have been most difficult for you to master (morphology, phonology, syntax, etc.)? Why do you think they have been harder?

5. Proponents of Universal Grammar believe that language ability is innate, whereas Functionalists believe that we develop language primarily because of a need to communicate. Which theory do you believe in? Why?

6. Some teachers attribute variation in learner errors to the nature of students' prior learning experiences, such as whether learning was formal or informal, communicative or grammar-oriented, and even which teachers and textbooks were part of the learners' experiences. Considering your own learning, do you feel such variables played a role in your L2 development? Cite specific examples.

7. As described in this chapter, beginning L2 learners produce sentences such as *He comed yesterday*, where regular rules are extended to irregular cases. What does this suggest about the formation of early IL? Can you think of cases in your own language learning where you have tried to impose such regularity improperly? Relate your characterization to the strengths and weaknesses of the contrastive analysis hypothesis.

8. Consider the process of looking at structures across languages. Do you agree that one can easily note similarities of structures and differences of structures? Do you agree that these cannot equal ease and difficulty of learning? In what circumstances might similarities/differences be compatible with ease/difficulty of learning?

9. Compare the approaches to the analysis of L2 data discussed in this chapter—contrastive analysis and error analysis—with regard to the following:

a. There may be covert errors. A classic example from Corder (1981) is the German speaker who says “You must not take off your hat,” when the intent is “You don’t have to take off your hat.” In what sense is this an error? In what sense is it not?

b. It might be more appropriate to talk about TL-like behavior. The fact that a learner has produced a correct form/sentence in a language does not necessarily mean that it is right.

c. It is not always possible to provide a single explanation for IL data.

10. A number of problems arise with the incorporation of the concept of “transfer” from psychology into SLA. Primary among them is the emphasis on controlled experimentation in a laboratory setting, within the framework of the psychology of learning. To apply this to an L2 situation is difficult, because many other variables come into play in SLA that are difficult to control. For example, controlled material presented in a

laboratory setting differs from an L2 learning situation in the complexity of what is being learned. What other differences can you think of between actual L2 learning and experimental learning?

11. In the discussion of errors, it was pointed out that errors are only errors from an external perspective (i.e., a teacher's or a researcher's). Is it possible that there are consistently incorrect forms (i.e., errors) that a learner recognizes as errors, but that remain as errors because a learner does not know how to correct them? Do you think that these would be forms "ripe" for change? Or are they likely to fossilize?

12. Four compositions follow. First, do an error analysis of each. Describe the difficulties you encounter in doing this. Are there ambiguities? How could you resolve them? Do you know what the NLs are of these writers? What features determine your choice?

### **Composition 1**

#### **"Things are Rough All Over" for Socs and Greasers**

There are many teenagers in *The Outsiders*, and each of them has several characteristics. There are many differences between the Socs and the Greasers, and each character who belongs to these groups has a different background. However, Cherry's saying, "Things are rough all over," applies to all characters in the story, so both the Socs and the Greasers have some "things" and "roughness." However, their "things" are not equally "rough."

Cherry says "Things are rough all over" as Soc. For Cherry and all the Socs, the part of rough is Rat race. Though they can get everything they want, it does not satisfy them. Because of it, the Socs take actions like Cherry said; we're always searching for something to satisfy us, and never finding it (p. 37). It might be suffering that the Greasers can not experience because they were not born in environment like the Socs. In addition, people who can not find something to satisfy them do antisocial behavior, and they are done to catch the hearts of their parents and people surrounded him. In the fact, Bob did so. His parents gave in to him, but he was not given loves from his parents. He came home drunker than anything to grab his parents' hearts, but he could not get his parents' love. In the other words, "things" are parents' love for Bob, and it was so "rough" for him, so "things are rough" to him. In addition, Cherry says to Ponyboy that the Socs also have sufferings, and it is not easy to solve them; that means Cherry's "things are rough all over."

Of course, not only the Socs but also the Greasers also have "things." For example, Johnny is not given love from his parents, Ponyboy's parents have been dead and he thinks his oldest brother hates him, and both his brothers, Sodapop and Darry, have worries about their brothers. Even Dallas, who seems so tough, suffers and wants to die. Thus, All of them have "things," but their "things" are not equally "rough."

For example, Ponyboy's parents never return, and Dallas can't talk with anyone about his "things," but it is possible that Johnny's worry is able to be solved if Jonny talks with his parents. It means their things have two types; fist type is that they can not solve immediately, another type is that they can not solve any more.

Moreover, each of their "things" has different difficulty to solve them. In the fact, Pony's brothers can resolve one of their "things" in the end of the story, but many characters still have their "things" by the end.

Thus, each of the Greasers has different levels of "roughness."

Cherry wants Ponyboy to understand that both the Socs and the Greasers can not have it made.

However, it is so difficult to Ponyboy to understand that because there is a big difference between the Socs and the Greasers. That is wealth. Ponyboy and all the Greasers have lived with preposition and poorness.

In addition, the Socs also have their “things” and “roughness.” However, the Greasers have problems of preposition and poorness besides their own “things,” so “things” are also unequally “rough” between these two groups. When Ponyboy heard Cherry’s words, he did not know about similarities and differences between the Socs and the Greasers. In the fact, he had some misunderstanding about the Socs; maybe it was money that separated us (p. 38), and I really couldn’t see what Socs would have to sweat about. I thought if I had worries like them I’d consider I’m lucky (p. 36). In addition, he did not perceive “things” and “roughness” of the same team members. Therefore, it was so difficult to him to understand Cherry’s words at that time. However, he came to understand Cherry’s words gradually. He learned about his friends’ and his brothers’ suffering by talking with them, and he understood the Socs by hearing about Bob from Randy; he could find that all the Greasers have their “things” and “roughness,” and even in the Socs who are rich kids also have worries same as the Greasers. Their worries are different, but it is the fact that all of them have some suffering. As Ponyboy noticed it, he was able to understand Cherry’s words.

Cherry’s words, “Things are rough all over,” are true for all the Socs and the Greasers, but all characters in *The Outsiders* have different “things” and “roughness.” The Socs have worries because of the wealth, and the Greasers also have worries because of their backgrounds. However, these differences are not important for Ponyboy. It is important for him that all people belonging to the Socs and the Greasers have suffering and worries, and it is significant that he know the other guys are also human.

## Composition 2

### Family and its Power!

In society exists various groups and one of these is family. Family has an important meaning but sometime we misunderstand what really is! Surely, standard family consists of husband and wife and children but his sense is wider. Family are we, family are friends that share emotions, family is my grandfather, family is my class; it exists everywhere where people join together and form a group sharing everything. In this last month I have had a lot of opportunity to read and learn about it. For instance, I read the book *Nightjohn*, as well as seeing the movie, and I spent a lot of time in sharing thoughts with my classmates about this topic.

The most cruel, but significant, example that I can use to explain family and its power is the why slave owners commonly broke up slave families. They had to maintain black people mentally weak to continue to live in their white status, and to reach such bad goal they separated its member to prevent rebellions. They had fear to lose power and money.

In fact, they had big cotton plantations and they owned black people; this gave them power in society and power on the slaves. They had this privileged life, for they hadn’t to work but they had to scrutinize the slaves’ works only. They were completely served and believed that their white status was superior of the black one. All this characteristics make them trust to be powerful, and to have the right to continue in such behavior. In the book there is a passage that I want to quote because it explains why white people had so fear of rebellion. “‘Cause to know things, for us to know things, is bad for them. We get to wanting and when we get to wanting it’s bad for them. They think we want what they got (39).” What they got was power, and they were so afraid to lose it that didn’t hesitate in whipping slaves until death.

Another reason was money. Having a plantation and owning slaves meant to be rich because every slave has money value and all together formed the muster’s wealthy. I want to narrate a passage in the *Nightjohn* that impressed me. The scenario developed in church among an argument between muster and slaves; he was furious and menaced to shot them with the gun, and, all of the sudden, *Sarny* stood up and cried out loud to didn’t have fear to be shouted, because they were his wealth and he would never shot.

Slaves worked in plantation that produced cotton; more over, they were money and could be traded if there was good opportunity. Indeed, *Sarny*’s mother was sold because she was a good breeder and muster did a good trade.

In the reason why master broke up slaves family lay hidden the family's power. Family is the place where the individual can find his own identity and to develop a sense of power. Identity is very important because everyone needs to know own root. This teaches us who we are and what are our values and our rights. In family we are socialized and we learn how to behave and what to aspect from our environment.

Furthermore, everyday by sharing emotions, ideals, dream we grow and become stronger and capable to accept sufferance.

I'm positive with family. I met my wife seventeen years ago and we immediately engaged and after seven years we got married. Nine months ago Viola, my sweetie daughter, was born and I feel to have achieved what I had ever dreamed from my life. Power and money are nothing without love and family.

Maybe this can seem a common sentence, but if you are in my condition, you know what I'm talking about.

I can't imagine a life without my family, I get lost without it and I need to thank god for such luckiness.

I want to finish this essay remembered *Nightjohn* movie when *Delie* said him, "You have a new family now and everywhere you go you'll find a new one." This is a big truth! In life everyone have good and bad moments, but what is really important is to have someone to share with. Remember that family is everywhere! Family are friends, family are parents, strangers and family are my wife and my Viola.

### **Composition 3**

#### **Peer Pressure Influences Teenagers**

Peer pressure influences teenagers in many aspects. It may have positive or negative matters. Friends have the biggest influence on each other. Girls and boys in their teenage period like to stick with each other if they share the same interests, or even if they are in the same status. They also feel uncomfortable when they join new group that is different from the group they usually stick with. In the *Outsider's* novel, there are two groups; Greasers and Socs. Each group influences its members with different kinds of matters.

There are some usual influences among the members in each group. They do many things which might be in their culture, habits, or they follow each other by apery. For example, Greasers influence each other by letting their hair grow up and they do not like any body to tell them to cut it. Furthermore, most of Greasers wear blue jeans, T-shirts, and tennis shoes or boots. On the other hand, Socs wear nice, expensive clothes with leather shoes. I can see most of the Socs are rich and drive expensive cars while the Greasers who were poor, drive cheap cars and use simple things.

Moreover, there were some negative attitudes in both groups with their members. For example, there was a girl whose named was Cherry said to ponyboy, did not take it personally if I did not talk with you in school. She meant by that she was from Socs and he was from Greasers and if she talked with him, she would lose her friends and they would give her bad treatment because of the race which they had against each other. Another thing, the guys influenced each other in many bad things: I could see most of them smoked cigarettes and some drink alcohol even though others were young people. In addition for that, there was no body would stop them because there was no one telling them that the smoking and drinking caused many health problems in their life.

There were some bad attitudes from the friends who were surrounded ponyboy. I can see Dally was always trying to tell his friend ponyboy to be tough and strong against other people who faced him like Greasers. In addition, Dally most the time made fun of people, showed off and insulted children in front of his friends ponyboy and Johnny. People do not like get directions. For example, Derry the oldest brother of pony boy always gave him directions which ponyboy did not like while ponyboy liked his second oldest brother Soda more than Derry because he understood him more and considered him like adult and did not give him directions so I could see ponyboy influenced more form Soda.

There are also some positive effects to ponyboy from his friends who were around him. He had a good friend whose named was Johnny always helped him, did not like to fight with other people and one time he bought a book and gave it to him and told him keep reading the book, because book would be best friend and stay with you until you die. One time Johnny had telling ponyboy fight was not good and useless. In addition, there was



also a good advice from him that he said to ponyboy several time “stay gold, stay gold and nothing good can stay.” I can see also ponyboy learned to help people with his friends Dally and Johnny after the church had burned, even caused his life to death but he tried with them to take out people who were in church and to save their life with his brave and his friends encouragements.

In brief, peer pressure might be good and bad on adults and even more on teenagers. We need to get the positive things from good peer pressure and try to be away from people who have bad influence on us by the advice which Johnny said “stay good” and this would be a great full advice we can learn from life.

## **COMPOSITION 4**

### **MY SIBLING’S RELATIONSHIP**

Not everyone has luck to have brothers or sisters in the family, but I am the lucky one; I have one brother.

He is one year old younger than me. He is not a lovely younger brother and I am also not a lovely elder brother. We always call each others full name, never call each other “brother”; however, we still respect and help each other. Of course, sometimes we do argue and fight, but we are still brothers. There are some similar and contracts relationships between the book, *The Outsiders*. I am going to compare with the book; however, let me tell you something about us first.

My brother and I both had learned music since when we were young. We both learned the same instruments: violin, piano and erhu (Chinese instrument) in the same music-elementary school. We both are studying in the U.S. right now. Music is important for both of us, because we had learned since we were young. It’s pretty useful; the reason is we would have some common things to do for both of us.

Sometimes we played in the same orchestra and sometimes we just played duet together. We always had good time when we play duet. Therefore, sometimes we would perform to some people. We used to study in the same high school for one year. We performed it at many places in that year. For instance, we played at the nursing house, many YMCA’s and school’s parties. We were happy about met lots of people and we hope they were enjoyed. As the book, brothers like to play each other. Darry, Sodapop, and Ponyboy enjoy the time they are together.

Every brother cares very much about their brothers. I can understand why Darry is very mad about Ponyboy being late to home after the movie, and after Darry and Sodapop very worry about Ponyboy when he and Johnny hide in the church. When my brother and I were in Taiwan, sometimes he went out with his friends until very late, and he did not call back home or my parents. I could not contact with him either. We were getting worried and angry about it. Therefore, I always kept telling him turn his cell phone on and let us know where he was going and when will he be back.

Every brother would protect their brothers. At begging of the book, Ponyboy got beaten by Socs. At that time, Darry and Sodapop saved Ponyboy. Later on in the story, even though Dally is not Johnny and Ponyboy’s brother, he still protects them as his younger brothers. He told them hide to the church, and tried to save them when they were in the fire. I would try to protect or help my brother when he gets troubles. I believe that he would do the same thing to me, too.

There is one thing I have in common with Darry; my brother and I don’t really show love to each others just like Darry does not show love to Ponyboy. As I said before, my brother is not a lovely younger brother and I’m not a lovely older brother. We both think it’s pretty nasty to be lovely. However, we still get along pretty well. We still care each other very much.

As others brothers, sometimes we argue and fight. Like Darry argues with Ponyboy and hits him when Ponyboy was late back to the house. However, brothers are still brothers. There is one thing I think it’s good to my brother and I. After we fight, we always get back to each other pretty soon. We don’t really keep fighting and fighting. I think that’s because we understand and we love each others.

## **Literature:**

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[https://www.researchgate.net/publication/49552300\\_Second\\_Language\\_Acquisition](https://www.researchgate.net/publication/49552300_Second_Language_Acquisition)

Saville-Troike M. (2012). Introducing Second Language Acquisition p.33-70.

Video with Ortega L. <https://www.teachingenglish.org.uk/article/what-sla-research-good-anyway>

Video with Kraschen S. <https://englishpost.org/language-acquisition/> (15 minutes!)

## MODULE 3: THE PSYCHOLOGY OF SECOND LANGUAGE ACQUISITION

### THEME 7: AGE AND SECOND LANGUAGE ACQUISITION

1. Age and language proficiency. Critical Period Hypothesis.
2. Age and rate of acquisition.
3. Explanation for differential attainment in language acquisition

*Task:* Think about individuals you know who learned your L1 as children and about those who learned your L1 as adults. Which ones seem more native-like to you? What characteristics of their language cause you to think they are more native-like? What factors (amount or type of input, time, cognitive differences, etc.) do you think may have caused these differences?

One of the most obvious ways in which second language learners differ is in terms of their starting age. Some learners start learning a second language in early childhood while many others have to wait till they go to school (often secondary school). A common assumption is that children are better language learners than adults and that, therefore, learners will be more successful if they start learning a second language when they are young. However—while there is some truth in this assumption—the research evidence shows that the effects of age on L2 acquisition are complex.

#### 1. Age and language proficiency

To address the relationship between starting age and attainment, two questions need to be investigated:

1. Can adult learners of a second language acquire native-like proficiency in a SL?
2. Do learners who start learning a second language in childhood acquire higher levels of L2 proficiency than learners who start as adults?

Some researchers have distinguished **prepuberty learners, adolescents, and adults**. Researchers have investigated ‘proficiency’ primarily in terms of pronunciation (for example,

the learner's accent) and grammar, but there are other important aspects of proficiency that need to be considered—for example, lexical knowledge (including formulaic sequences) and the pragmatic ability needed to use language in sociolinguistically appropriate ways—which have been little investigated.

A further issue is whether proficiency is to be conceptualized as **implicit knowledge** (i.e. the kind of knowledge needed to engage in fluent, spontaneous language use) or **explicit knowledge** (i.e. the kind of knowledge that many traditional language tests tap).

### **Critical Period Hypothesis**

The **Critical Period Hypothesis (CPH)** was first proposed by Penfield and Roberts (1959). The hypothesis states that there is a period (typically defined as the period up to the onset of puberty) during which learners can acquire a second language easily and implicitly and achieve native-speaker competence, but after which L2 acquisition becomes more difficult and is rarely entirely successful.

Evidence in support of the hypothesis initially came from outside SLA. Lenneberg (1967) reported research which showed that *when children suffered injuries to the right hemisphere they experienced language problems, but adults did not. Conversely, when adults underwent surgery to the left hemisphere almost total loss of language occurred whereas this did not occur with children. Adults showed permanent language impairment after such operations, but children rapidly recovered total language control.* Lenneberg concluded that the biological basis of language in children and adults differs.

Further evidence for this conclusion came from cases of unfortunate children who were deprived of opportunities to hear and speak a language during childhood. Curtiss (1977) reported a study of Genie, who was kept in isolation for most of her life. When discovered at the age of 13, she had no language. Genie was subsequently successful in learning English to some extent, especially vocabulary, but failed to achieve full grammatical competence. She also had problems in engaging in normal social interaction. Curtiss suggested that her limited grammatical development was because she had passed the critical period for language acquisition. Rymer (1993) pointed out, however, that the root cause may have been the

emotional disturbance that Genie had experienced as a child and continued to manifest as an adult.

There is no clear consensus on when the critical period for language learning ends. Singleton (2005) in a survey of the literature that addressed this issue reported claims ranging from near birth to late adolescence. Also, it has become clear that—if there is a critical period—this varies depending on the aspect of language under examination. Granena and Long (2012), for example, provided evidence to suggest that the window of opportunity closes first for L2 phonology (perhaps as early as four-years-old), then for lexis and collocation, and finally (in the mid-teens) for grammar.

### **Theoretical importance of the CPH**

The theoretical importance of the CPH lies in the fact that it supports Chomsky's (1965) view of language. Chomsky argued that children are equipped with a **language acquisition device**—an innate, biologically-given capacity for learning language that is distinct from other cognitive abilities. This device—according to Chomsky—contains knowledge of the linguistic universals that underlie the grammatical rules of every language and—because children have access to these universals—they are able to master the grammar of their mother tongue.

Children acquire full grammatical competence because they have access to the language acquisition device. Adults, however, lose it and rely on general cognitive abilities. At this point, people develop the capacity for logical thought, deductive reasoning, and systematic planning. Such abilities suffice to enable people to learn a language to a certain extent but do not totally compensate for the loss of the language acquisition device. As a result, older learners fail to acquire all of the grammatical features of the L2.

### **Investigating the CPH**

The CPH has been subjected to empirical study in two main ways. One way involves comparing groups of learners who commenced learning as children with other groups who started post puberty. The second way involves investigating whether learners who started learning post puberty were successful in achieving full competence in the second language (i.e. had become totally native-like).

These two approaches reflect somewhat different versions of the hypothesis. One version is that the end of the critical period signals the point at which decline in the ability to learn a second language begins. The strong version of the hypothesis is that once past the critical age, natural acquisition is blocked irrespective of whether learners are just past it or many years past it.

In these studies the notion of a **discontinuity** in learning is emphasized; that is, after a certain age, the pattern of learning changes.

*One of the most commonly cited studies is Johnson and Newport (1989). They studied 46 native Koreans and Chinese who had arrived in the United States between the ages of three and 39, half before the age of 15 and half after 17. The learners were asked to judge the grammaticality of 276 spoken sentences, about half of which were grammatical. Overall the correlation between age at arrival and correct judgement scores was  $-0.77$  (i.e. the older the learners were at arrival, the lower their scores). In contrast, neither the number of years of exposure to English beyond five nor the amount of classroom instruction they had received was related to their grammaticality judgement scores. Also, although an effect for 'identification with American culture' was found, this was much weaker than that for age.*

Johnson and Newport argued that there was a sharp discontinuity in the effects evident for age after the critical period. In the case of the early starters, there was a gradual decline in performance according to age. However, in the case of the late starters, the relationship between age and performance was random. However, this claim was subsequently disputed. Bialystok and Hakuta (1999) reanalyzed Johnson and Newport's data and concluded that there was no evidence of a clear discontinuity

Now we will focus on studies that measure achievement by means of **grammaticality judgement tests** (i.e. tests that present learners with a set of sentences and ask them to judge whether they are grammatical or not).

*Coppetiers (1987) compared the performance of 20 native speakers and 21 highly proficient learners of French on a grammaticality judgement test. All the learners had begun learning as adults and they all appeared nativelike in their spoken French. The results showed clear differences between the two groups. Coppetiers concluded that the grammatical competence of the L2 learners differed from that of native speakers.*

*However, Birdsong (1992) replicated this study and reported very different results. He administered a grammaticality judgement test to 20 English-speaking learners of L2 French who were natively like in their oral ability and to 20 native speakers of French. Birdsong found no evidence of any dramatic differences in the judgements of the two groups. A number of the non-native speakers performed in the same range as the native speakers.*

This study, then, suggests that at least some learners who start learning a second language after puberty can achieve a level of competence indistinguishable from that of native speakers.

Other studies carried out in-depth investigations of individual learners. Ioup, Boustagui, El Tigi, and Moselle (1994) studied a highly successful learner (Julie) who did not start learning her L2 (Arabic) until she was 21 years. Lardiere (2007) studied a learner (Patty) who had had almost no contact with the L2 (English) until she was 18 years old but subsequently—like Julie—was immersed in the L2 environment. Both learners had been learning their L2 for more than 20 years and both—especially Julie—demonstrated a high level of grammatical proficiency. However, arguably neither of them achieved totally native-like ability. Julie, for example, did make some mistakes in a translation test and did not perform exactly like native speakers in a grammaticality judgement test. Patty continued to make morphological errors in features such as subject-verb agreement and plural *-s*. These studies, then, lend support to the CPH.

However, other studies suggest that L2 learners who started learning postpuberty were able to achieve native proficiency. Bongaerts (1999), for example, used native-speaker ratings to investigate whether nine post-adolescent Dutch learners of L2 French had attained a native-level accent. Recordings of their speech were mixed in with recordings of 18 lower-level Dutch learners of French and nine native speakers. Three of the advanced learners passed for native speakers. Bongaerts argued that high motivation combined with pronunciation training enabled these talented learners to achieve native level.

To counter Bongaert's claim, it is necessary to show that there are at least some differences between very successful late-starting learners and native speakers. Abrahamsson

and Hyltenstam (2009) found evidence of this. Using ten measures of pronunciation, vocabulary, and grammar, they reported that none of the late-starting native-like learners in their study scored in the same range as native speakers on *all* of the measures although they did on some. In contrast, some of the early-starters (younger than 12) did succeed in performing identically to the native speakers. Hyltenstam and Abrahamsson (2003) argued that the subtle differences between near-native and native proficiency, which they found evidence of, give support to the CPH, but they also noted that these differences ‘are probably highly insignificant in all aspects of the second language speaker’s life’ (p. 580).

### *Reaching a conclusion about the CPH*

On balance, the research suggests that it is unlikely that post-puberty L2 learners are capable of achieving completely native levels of proficiency—at least when highly sensitive measures of L2 proficiency are examined. However, to claim that there is a critical period for learning a second language, it is necessary to demonstrate that there is a clear discontinuity between a period when full competence is possible and a period when it is not possible.

## **2. Age and rate of acquisition**

In general, older learners learn more rapidly than child learners at first except in pronunciation. However, older learners only have an initial advantage but, over time, child learners catch up and surpass them.

The most cited study addressing age and the rate of acquisition is Snow and Hoefnagel-Höhle (1978). This study investigated the naturalistic acquisition of Dutch by eight- to ten-year-old English-speaking children, 12- to 15-year-old adolescents, and adults over a ten-month period. The learners’ proficiency was measured on three separate occasions (after three months, after six months, and at the end of the study). With regard to morphology and syntax the adolescents did best, followed by the adults, with the children last. However, there were only small differences in pronunciation, and the grammar differences diminished over time as the children began to catch up.



Experimental research also indicates that in formal learning situations adults seem to do better than children—even in pronunciation—the area of learning that most favours children. For example, Cochrane (1980) investigated the ability of 54 Japanese children and 24 adults to discriminate English /r/ and /l/. The average length of naturalistic exposure was calculated as 245 hours for the adults and 193 for the children (i.e. relatively little). Before the instruction, the children outperformed the adults. However, when the two groups were taught the phonemic distinction, the adults benefited while the children did not.

Older learners also outperform younger learners in vocabulary development (Singleton 1999). No matter whether the context is a naturalistic one, a shortterm instructional one, or a long-term instructional one, older children outperform younger children and adult/adolescent learners progress more rapidly than child learners.

Overall, then, older learners have an initial advantage over younger learners, especially in grammar and vocabulary. This can be explained by the more advanced abilities that come with the formal operations stage of cognitive development; older learners are better equipped to make use of conscious **learning strategies**. Children, however, have an advantage in **implicit learning** and over time this enables them to catch up and overtake older learners.

### **3. Explanation for differential attainment in language acquisition**

Various explanations have been offered for the well-attested fact that most adults do not (or cannot) become fluent in an L2. Among them are the following:

**Sociopsychological reasons:** There are many different versions of this hypothesis. Some suggest that adults do not want to give up the sense of identity their accent provides. Some suggest that adults are unwilling to surrender their ego to the extent required to adopt a new language, which entails a new life-world.

**Cognitive factors:** Adults have greater cognitive abilities than children. Ironically, adopting the cognitive abilities in a language-learning task has been hypothesized to result in less

successful learning than is found in children, who, according to the hypothesis, rely to a greater extent on a specific language acquisition device.

**Neurological changes:** Such changes prevent adults from using their brains in the same way children do on language-learning tasks. This is usually presented as a loss of plasticity, or flexibility, in the brain. As a person ages, there is a progressive lateralization of cerebral functions (The **lateralization** of brain function is the tendency for cognitive processes to be specialized to one side of the brain or the other.). The consequence of this and other cerebral changes is that the neural substrate needed for language learning is no longer fully available later in life.

**Exposure to better input:** The assumption here is that adults adapt their language when talking to children which provides better data about language.

**Maladaptive gain of processing capacity:** Processing and memory capacities change as a person matures (see Birdsong, 1999b).

**Loss of (access to) the language-learning faculty:** Successful language learning cannot take place after puberty because there is a loss of Universal Grammar and possibly a loss of innate learning strategies.

**“Use it, then lose it”:** If one doesn’t use the innate faculty, it will atrophy with time. In other words, it is a slow loss rather than an all-at-once dismantling, and adult language learning comes at a greater distance from initial acquisition as a child.

**Learning inhibits learning:** Language learning involves accumulating and strengthening associations. Thus, the strength of associations from the NL might interfere with the possibility of formulating and strengthening new associations.

## **Summing up**

1. While learners who start learning as adults can achieve high levels of L2 proficiency, there is growing evidence that they fall short of total native-like competence. However, this may simply reflect the fact a bilingual’s ‘multicompetence’ is qualitatively different from a monolingual’s competence.

2. Controversy exists as to whether there is a critical period for language acquisition. However, even if there are no well-defined age limits for achieving native ability in a second language, starting age has been shown to correlate with ultimate achievement. To avoid the problem of whether or not there are clear discontinuities before and after a critical age, some researchers have opted to talk about a 'sensitive period' rather than a 'critical period'.
3. Critical (or sensitive) periods have been found for different aspects of language—the period ends first for phonology, then for lexis and collocation, and finally for grammar.
4. The advantage of starting young for ultimate attainment only arises if learners have ample exposure to the target language. For this reason, doubts exist about the value of starting to learn a foreign language in a classroom at an early age.
5. Older learners acquire a second language more rapidly than younger learners in the initial stages, except in the case of pronunciation. This may reflect the fact that older learners make fuller use of conscious learning strategies while children rely more on implicit learning.
6. Whether age has an effect on the process of L2 acquisition is uncertain. Some research shows that starting age has no effect on the order and sequence of acquisition, but other research suggests that the analytical skills of older learners have an impact on how they acquire specific grammatical features.

### **Concluding comment**

From a theoretical perspective, the key question is *why* young learners are capable of higher levels of attainment than older learners (after controlling for the number of years of exposure to the second language). One possibility is that younger learners are better equipped to engage in implicit learning and older learners rely more on explicit learning. Implicit learning is a slow process that requires massive exposure to the second language so no immediate advantage is apparent for younger learners. In fact, explicit learning may lead to more immediate success. However, over time, implicit learning wins out because it is more likely to enable learners to develop high levels of L2 proficiency.

## ***TASKS FOR SEMINAR: AGE AND SECOND LANGUAGE ACQUISITION***

### Topics for discussion

1. Age and language proficiency. Critical Period Hypothesis.
2. Age and rate of acquisition.
3. Explanation for differential attainment in language acquisition

### Tasks:

1. From your own experience, do you agree that adults learning an L2 have differential success than children learning an L1, or learning an L2? How would you set up an experiment to deal with these questions?
2. In groups, talk about the relationship between the starting age of learners and attainment in terms of language proficiency. Support your views by empirical evidence.
3. Fill out the chart (but first consider the difference in the acquisition of pronunciation, vocabulary and grammar by children and adult language learners):

Differential success in language acquisition

	Advantages	Disadvantages
Children		
Adults		

4. Comment on the following citations. How far do you agree or disagree with them. What are their implications to the problem under discussion?

*a) Hytlenstam and Abrahamsson (2003) claim that only children reach native-like proficiency: Nevertheless, given the fact that there are no published accounts of a single adult starter who has reached native-like overall L2 proficiency, and given the frequent observation of non native features even in very early starters, we would suggest the possibility that absolute native-like command of an L2 may in fact never be possible for any learner. According to such a view, the language learning mechanism would be designed in such a way that it requires immediate triggering from the environment in order for it to develop and work appropriately; that is, the learning mechanism inevitably and quickly deteriorates from birth if not continuously stimulated (p. 575)*

*b)Patkowski (1980, pp. 462ff.) discusses the Conrad phenomenon, named after Joseph Conrad, the native Pole who learned English at the age of 18 and became one of the greatest English novelists: The writing style which is most natural for you is bound to echo the speech you heard when a child. English is the novelist Joseph Conrad's third language, and much that seems piquant in his use of English was no doubt colored by his first language, which was Polish.*

*c)According to Pinker (1994, pp. 294–295): Language-acquisition circuitry is not needed once it has been used; it should be dismantled if keeping it around incurs any costs. And it probably does incur costs. Metabolically, the brain is a pig. It consumes a fifth of the body's oxygen and similarly large portions of its calories and phospholipids. Greedy neural tissue lying around beyond its point of usefulness is a good candidate for the recycling bin.*

5. Are there students in the class who were exposed to, or learned, second languages before puberty? What were the circumstances, and what difficulties, if any, were encountered? Has authentic pronunciation in the language remained to this day?

6. Is there anyone in the class, or anyone who knows someone else, who started learning a second language after puberty and who nevertheless has an almost "perfect" accent? How did you assess whether the accent was perfect? Why do you suppose such a person was able to be so successful?

7. (G/C) In groups, try to determine the criteria for deciding whether or not someone is an authentic native speaker of your native language. In the process, consider the wide variety of "World Englishes" commonly spoken today. How clearly definitive can your criteria be? Talk about occupations, if any, in which a native accent is indispensable. Share with the rest of the class, and try to come to a consensus.

8. (G) In groups, talk about any cognitive or affective blocks you have experienced in your own attempts to learn a second language. What could you do (or what could you have done) to overcome those barriers?

9. (C) Do you think it is worthwhile to teach children a second language in the classroom? If so, how might approaches and methods differ between a class of children and a class of adults?

## **LANGUAGE LEARNING EXPERIENCE: JOURNAL ENTRY**

You are strongly encouraged to commit yourself to a process of weekly journal entries that chronicle a previous or concurrent foreign language learning experience. In so doing, you will be better able to connect the issues that you read about in this book with a real-life, personal experience. Remember, a journal is meant to be "freely" written, without much concern for beautiful prose, rhetorical eloquence, or even grammaticality. It is your diary in which you can spontaneously record feelings, thoughts, reactions, and questions.

The prompts that are offered here are not meant to be exhaustive, so feel free to expand on them considerably. The one rule of thumb to follow in writing your journal is: connect your own experiences learning a foreign language with issues and studies that are presented in the chapter. Your experiences then become vivid examples of what might otherwise remain somewhat abstract theories.

- How good do you think your pronunciation of your foreign language is? How do you feel about your pronunciation—satisfied, dissatisfied, resigned, in need of improvement? Assuming you would not expect to be 'perfect,' what steps can you take (or could you have taken) to improve your pronunciation to a point of maximum clarity of articulation?
- Given your current age for your age, do you feel you're too old to make much progress? Are you linguistically "over the hill" with little hope of achieving your goals? Analyze the roots of your answers to these questions.
- Children might have some secrets of success: not monitoring themselves too much, not analyzing grammar, not being too worried about their egos, shedding inhibitions, not letting the native language interfere much. In what way did you, or could you, put those secrets to use in your own learning?
- In learning a foreign language, were any aspects (such as listening discrimination exercises, pronunciation drills, learning grammar rules, small group conversations, reading, or writing) easier than others for you? Analyze what made certain procedures easier than others.
- Do you think you might have some advantages over children in learning a foreign language? Speculate on what those advantages might be. Then make a list of strategies you could use to capitalize on those advantages.

## SUGGESTED READINGS

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## THEME 8: PSYCHOLOGICAL FACTORS AND SECOND LANGUAGE ACQUISITION

1. Key psychological factors and second language acquisition (cognitive, conative, affective).
2. Language aptitude.
3. Motivation. Theories of motivation.
4. Language anxiety.
5. Culture shock.
6. Social distance.
7. Extroversion and introversion.

### 1. Key psychological factors and second language acquisition

Psychological factors are traditionally divided into three principal types: cognitive, conative, and affective. **Cognitive factors** are those that influence the processing, storing, and retrieval of information. The cognitive factor that has attracted the most attention in SLA is **language aptitude**. **Conative factors** influence the learner's ability to establish a goal and maintain effort to achieve it. In SLA, the key conative factor is **motivation**. **Affective factors** determine whether people respond positively or negatively to specific situations. For example, learners may vary in the extent to which they experience **language anxiety**. These psychological factors have been of interest to researchers because they help to explain differences in individual learners' rate and success in learning a second language.

#### Cognitive factors

**Intelligence.** Intelligence is 'a general sort of aptitude that is not limited to a specific performance area but is transferable to many sorts of performance' (Dörnyei, 2005: 32). Intelligence has often been treated as a general ability but H. Gardner (1993) proposed that there are multiple intelligences (for example, mathematical intelligence, spatial intelligence, and linguistic intelligence).

**Language aptitude.** Language aptitude is the special ability for learning a second language. It is considered to be at least partly separate from general intelligence. Language aptitude has

been theorized as involving a number of distinct abilities—phonemic coding ability, grammatical sensitivity, inductive language-learning ability, and rote-learning ability (Carroll, 1965).

***Learner beliefs.*** Learners form ‘mini theories’ consisting of the beliefs that they hold about language learning. Beliefs can be classified in terms of whether they reflect an experiential or analytic approach to learning. Learners also hold beliefs about their own self-efficacy as language learners.

### **Conative factors**

***Motivation.*** Motivation is a complex construct that involves the reasons or goals learners have for learning a second language, the effort they put into learning, and the attributes they form as a result of their attempts to learn. Various theories of the role played by motivation in L2 learning have been proposed. Early theories distinguished ‘instrumental’ and ‘integrative’ motivation and ‘extrinsic’ and ‘intrinsic’ motivation. Theories of motivation have continued to develop and currently emphasize its dynamic nature and the importance of context.

***Willingness to communicate.*** Willingness to communicate is defined as ‘the intention to initiate communication, given a choice’ by MacIntyre, Baker, Clement, and Conrad (2001: 369). It is viewed as influenced by a number of other factors and as the immediate antecedent of communication behaviour.

### **Affective factors**

***Language anxiety.*** Different types of anxiety have been identified: (1) trait anxiety (a characteristic of a learner’s personality), (2) state anxiety (apprehension that is experienced at a particular moment in response to a definite situation), and (3) situation-specific anxiety (the anxiety aroused by a particular type of situation). Language anxiety is seen as a specific type of situation-specific anxiety. It can be facilitating (i.e. have a positive effect on L2 acquisition) but is generally seen as debilitating (i.e. have a negative effect).

### **Mixed factors**

***Personality.*** Personality is generally conceived of as being composed of a series of traits such as extraversion/introversion and neuroticism/stability. An array of different personality



characteristics such as self-esteem, openness to experience, and risk-taking have been claimed to be significant in language learning.

**Learning style.** Learning style refers to the preferred way in which a person sets about learning in general. It reflects ‘the totality of psychological functioning’ (Willing 1987: 6) involving affective as well as cognitive activity. A variety of learning styles have been considered relevant to language learning (for example, sensory preferences, inductive vs deductive, synthetic vs analytic).

## 2. Language aptitude

Language aptitude is viewed as a ‘special talent’ for language learning. However, it is better defined as a conglomerate of abilities that interact dynamically with the situation in which learning takes place (Kormos, 2013).

Language aptitude is not the same as **intelligence**. Sasaki (1996) conducted a study with Japanese learners of English and concluded that although the two constructs were related they were also in part distinct. Intelligence was found to be related to one aspect of language aptitude in particular—**language analytical ability**—but not to other aspects.

We will now examine what these abilities are, starting with the early work by Carroll (1965) and then taking a closer look at more recent models of language aptitude.

### *Carroll’s model of language aptitude*

His research in the 1950s was directed at designing tests that would indicate which learners were likely to be successful in terms of how rapidly they could learn a second language.

He developed five tests comprising the **Modern Language Aptitude Test (MLAT)** (Carroll and Sapon, 1959).

<i>Phonemic coding ability.</i> The ability to code unfamiliar sounds in a way that they can be remembered later.
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<i>Grammatical sensitivity.</i> The ability to recognize the grammatical functions of words in
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sentences.
<i>Inductive language-learning ability.</i> The ability to identify patterns of correspondence and relationships between form and meaning.
<i>Rote-learning ability.</i> The ability to form and remember associations between L1 and L2 vocabulary items.

*Table 3.2 Carroll's model of language aptitude*

Later, researchers asked whether a new model of language aptitude and a different battery of tests were needed to account for the abilities required by more communicative approaches to teaching and for learning in naturalistic contexts.

The MLAT has proven to be a robust and useful instrument and survives as the most popular measure of language aptitude today.

Gardner and MacIntyre (1992) commented: 'in the long run language aptitude is probably the single best predictor of achievement in a second language' (p. 215). It has also become clear that it is not just a predictor of performance on traditional language tests and formal classroom learning. It also predicts success in more communicative tests and in naturalistic, 'acquisition-rich' contexts.

### **Aptitude and type of learning**

Now we will consider studies that investigated the role of language aptitude in implicit and explicit learning.

De Graaff (1997) investigated the relationship between two measures of language aptitude (grammatical sensitivity and memory) and the learning of simple and complex grammatical structures by adult learners, some of whom received **explicit instruction**—where the rules were explained—and others **implicit instruction**—where there was no rule explanation. Language aptitude correlated with the test scores of both groups of learners for both grammatical structures and there was no difference between the two groups. In other words, language aptitude proved to be an explanatory factor irrespective of the type of instruction.

Some studies (for example, Erlam 2005) suggest that aptitude may not necessarily play a role in either implicit or explicit learning. There are two possible hypotheses regarding the relationship between aptitude and explicit instruction. One is that learners with greater aptitude (especially language analytical ability) will be better equipped to handle instruction involving rule explanation. The other hypothesis is that careful rule explanation can compensate for differences in aptitude. It is not yet possible to determine which of these hypotheses is correct. Overall, no clear conclusion can be reached about the role of language aptitude in different types of learning. It would seem likely, however, that some abilities (for example, phonological ability and memory) are important in both implicit and explicit learning.

### **Reconceptualizing language aptitude**

The developments that we will now consider were of two main kinds. The first involved an attempt to relate language aptitude to concepts as **noticing**, **noticing-the-gap**, and **pushed output**. In other words, language aptitude was now examined in relation to the *process* of acquisition and not just to its *product*. The second approach entailed attempts to develop new ways of measuring aptitude, in particular, by incorporating **working memory** into the model.

Skehan (2002) proposed a model of language aptitude that links different components to 4 macro stages in the process of language acquisition: (1) noticing, (2) patterning, (3) controlling, and (4) lexicalizing. In the case of (1) the relevant abilities are those involved in processing input; (2) involves analytic ability; (3) involves those abilities associated with controlling existing L2 knowledge whilst; (4) involves the memory abilities associated with converting rule-based knowledge into ready-made chunks that facilitate easy communication (a process Skehan called ‘lexicalizing’).

A feature of these models is the importance they attach to **working memory**.

It is not difficult to see why learners’ working memory capacity is so important for language learning. Learners with a larger capacity will be able to store more linguistic data, rehearse it more fully, and make links with information stored in long-term memory. Working memory is hypothesized to be especially important in implicit learning when learners are

primarily focused on meaning. J. Williams (2005), for example, provided evidence to show that differences in **phonological short-term memory** (i.e. the ability to store auditory traces) predicted differences in learners' ability to learn certain grammatical features such as gender agreement in Spanish implicitly.

However, the results of working memory research in SLA to date have not always produced easily interpretable results. As Ortega (2009) noted, research has only begun to 'scratch the surface' of the relationship between working memory and L2 learning. Nevertheless, there are strong theoretical reasons, supported by some research findings, to indicate that working memory is an important component of language aptitude. In particular, short-term phonological memory appears to play a significant role.

### **Summing up**

1. Early work in language aptitude centred around the development of tests—such as Carroll and Sapon's (1959) Modern language Aptitude Test (MLAT)—that were used to predict how easily learners would learn a second language.
2. The MLAT is a robust and useful instrument and continues to be used in research today. It has been shown to predict success in learning in both naturalistic and instructed contexts.
3. As language aptitude is comprised of a number of distinct abilities, it is possible that learners differ in the abilities they are strong in. Skehan (1986) proposed a distinction between analytic-oriented and memory-oriented learners, both of whom can achieve success.
4. Language aptitude was initially seen as a stable, trait-like construct, but this view was subsequently challenged. There is evidence to suggest that abilities change as a result of learning experience and therefore may be trainable.
5. There is a relationship between language aptitude and age. A high level of language analytical ability may be required to enable adult learners to achieve high levels of L2 proficiency (DeKeyser 2000). This ability, however, appears to be of less importance for child learners.

6. The abilities required for implicit and explicit learning may also differ. For example, phonological coding ability is more important for implicit learning while language analytical ability is more important for explicit learning.

7. The original conceptualization of language aptitude has changed. New models (Skehan 2002; Robinson 2002) have been developed that link specific abilities to stages in the process of L2 acquisition and to the requirements of different instructional tasks. Central to these new models is working memory, which is now seen as a key component of language aptitude.

### **3. Motivation. Theories of motivation.**

*Task: a.* Think about your own success (or lack thereof) in learning an L2. Do you believe that motivation or aptitude were more important in determining how successful you were in learning the language? Why?

b. Think about your own L2 learning experience. Have you been motivated to learn? If yes, do you think that helped you succeed. If no, do you think that hindered your learning? Why or why not?

Motivation is a complex construct. It involves:

1. The reasons a learner has for needing or wanting to learn an L2 (i.e. motivational orientation).
2. The effort a learner makes to learn the L2, the learner's persistence with the learning task, and the impact immediate context has on these (i.e. behavioural motivation).
3. The effect that the learner's evaluation of his/her progress has on subsequent learning behaviour (i.e. attributional motivation).

Let's turn to the discussion of tendencies and traditions in the motivation research.

#### *The social-psychological period (1959–1990)*

This period was dominated by the work of Canadian social psychologists, who were interested in the role that motivation played in language learning in a society that was divided

into Anglophone and Francophone communities. The starting point was the recognition that learners' motivation depended on their attitudes towards the other community and to the target language, and that these were socially determined.

Gardner and Lambert (1972) distinguished two broad orientations: an **integrative orientation** entails a desire to identify with the target-language culture and its speakers; an **instrumental orientation** arises when learners wish to learn a second language for functional purposes (for example, to pass an examination or obtain a job).

Motivation, however, comprises more than the learner's orientation. It is also influenced by the learner's attitudes towards the learning situation (for example, attitudes towards the teacher and the instruction) and the actual effort that the learner puts into learning a second language. 'Motivation', then, is a composite construct involving orientation, attitudes, and effort. Gardner's (1985) **Socioeducational Model** also emphasized the importance of the social and cultural milieu in which learning took place. This determined the cultural beliefs learners held, which in turn influenced their orientation and attitudes to the learning situation. Gardner also acknowledged the role played by language aptitude in determining learning outcomes, but saw it as only relevant in formal learning contexts.

The main findings of this research can be summarized as follows:

1. Integrative motivation is positively correlated with various measures of L2 achievement.
2. Learners' integrative motivation was also found to be related to the teacher's and students' classroom behaviours (for example, students' voluntary responses to teacher questions).
3. Learners with an integrative motivation were less likely to abandon learning a second language (Ramage 1990).
4. In some contexts, however, integrative motivation was found to be negatively associated with achievement and that other motivations could be important: for example, Oller, Baca, and Vigil (1977) reported that Hispanic learners of English in California were more motivated by a 'Machiavellian motivation' (i.e. a desire to manipulate and overcome speakers of the target

5. Overall, instrumental motivation is a much weaker predictor of L2 achievement than integrative motivation (Masgoret and Gardner 2003).
6. However, instrumental motivation can play a bigger role in foreign language contexts where learners have little interest in the target language culture.
7. The benefits of an instrumental motivation are likely to wear off once the instrumental objective has been achieved as learners cease making any effort to learn. This is especially likely to occur in some foreign language contexts.

Gardner's Socio-educational Model has been subjected to considerable criticism. It took no account of the impact that success in learning can have on a learner's motivation. Gardner's theory paid scant regard to the fact that a learner's motivation is not static but dynamic, continuously responsive to the learning conditions. Perhaps the most serious limitation, however, lies in how the role of social milieu was conceived. The key notion of integrativeness is of obvious relevance to a sociocultural context such as Canada where there are clear L1 and L2 communities, but is less clearly relevant to many contexts where the notion of the 'target language community' is highly problematic (for example, monolingual contexts such as Japan, or the complex multilingual and multicultural contexts found in the USA).

#### *The cognitive-situated period*

In this period researchers turned to theories of motivation in cognitive psychology by examining factors that aroused intrinsic interest in learners and learners' perceptions of the reasons for their success or failure.

#### **Self-determination Theory**

(Deci and Ryan 1985) People are motivated by both external factors such as rewards, grades, or the opinions of others and by internal ones such as personal interests, curiosity, or experiencing an activity as fun. The distinction between **intrinsic motivation** and **extrinsic motivation** was developed. They defined extrinsically motivated behaviours as 'those actions carried out to achieve some instrumental end' and intrinsic motivation as 'motivation to engage in an activity because it is enjoyable and satisfying to do so' (p. 61).

Various sub-categories of each type were distinguished. For example, intrinsic motivation could be derived from (1) knowledge (i.e. the motivation derived from exploring new ideas and knowledge), (2) accomplishment (i.e. the pleasant sensations aroused by trying to achieve a task or goal), and (3) stimulation (i.e. the fun and excitement generated by actually performing a task).

The notion of **amotivation** (i.e. the absence of any motivation to learn) was introduced.

### **Attribution Theory**

**Attribution Theory** (Weiner 1992) views motivation as deriving from the explanations that learners give for their progress in learning a second language. There are three main types of attributions. First, they can be **internal** (i.e. learners explain their performance in terms of their own ability or lack of it) or **external** (i.e. learners place the blame for learning problems on external factors). Second, learners can perceive the outcome of their learning efforts as **stable** or **unstable**. In the case of the former, learners may be less inclined to make any further effort as they believe it will make no difference, but in the case of the latter, they may try harder. The third set of attributions concerns whether the factors influencing success or failure are seen as **controllable** or **uncontrollable**. Learners will be more motivated to improve if they perceive the cause of their difficulties lies within themselves rather than in other people (for example, a poor teacher).

### **The process-oriented period**

During this period, researchers turned their attention to examining the dynamic character of motivation and the temporal variation.

**The Process Model of L2 Motivation** (Dörnyei and Otto 1998) constitutes the fullest attempt to represent the complex, dynamic nature of motivation. It proposes three phases:

1. *Pre-actional phase*. This involves goal-setting and the formation of an action plan. Dörnyei and Otto refer to this stage as ‘choice motivation’.
2. *Actional stage*. This is when learners begin to implement their action plan. It involves ‘executive motivation’.



3. *Post-actional phase*. This is when the learner evaluates the outcome of the actions undertaken and forms causal attributions about the reasons for the success or failure of the action plan.

### **Group dynamics and motivation**

The second major development during this period centred on the powerful motivating force of group dynamics. As Dörnyei and Murphey (2003) noted, ‘groups have been found to have a ‘life of their own’—that is, individuals in groups behave differently from the way they do outside the group’ (p. 3). In other words, while motivation is a construct that relates to the individual learner, it will be influenced by the other members of the group that the learner is part of.

### **Dörnyei’s L2 Motivational Self System**

Dörnyei (2009) proposed a new theory of L2 motivation. The underlying principle of this theory is that motivation does not arise when learners identify with other speakers of the language (as in Gardner’s socioeducational model), but with future versions of their own selves.

There are three components to the **L2 Motivational Self System**:

1. *Ideal L2 Self*. ‘If the person we would like to become speaks an L2, the ‘*ideal L2 self*’ is a powerful motivator to learn the L2 because of the desire to reduce the discrepancy between our actual and ideal selves’ (Dörnyei, 2009: 29)
2. *Ought-to Self*. This ‘concerns the attributes that one believes one ought to possess to meet expectations and to avoid possible negative outcomes’ (p.29). (for example, performing poorly in an examination).
3. *L2 Learning Experience*. This refers to the ‘executive motives related to the immediate learning environment and experience’ (p. 29). Important factors here are the impact of the teacher, the curriculum, the peer group, and the experience of success.

### **Summing up**

Following is a summary of the main dimensions of motivation that have been identified:

1. The Socio-educational Model emphasized the role of integrativeness in L2 achievement. In some contexts, such as bilingual Canada, learners who have a desire to identify with the target-language culture and its speakers achieve more than those who lack this desire.
2. Learners' self-confidence also plays a role in second language learning.
3. Situation-specific factors are influential in facilitating learners' intrinsic motivation, which is likely to be more powerful than extrinsic motivation in promoting learning.
4. Learners form attributions about their success and failure and their subsequent motivation will depend on these attributions.
5. Motivation should ultimately be seen as a 'process' rather than a 'state'. Dörnyei and Otto proposed a model of motivation-as-process by distinguishing the factors involved in choice, executive, and retrospective motivation.
6. Motivated learners are self-regulated (i.e. they plan, monitor, and evaluate their attempts to learn).
7. A learner's motivation is influenced by other learners; the dynamics of a classroom or of a learning group affect the extent to which individual learners are motivated, both overall and when performing specific tasks.
8. In part at least, motivation is an interactional phenomenon as it is generated and maintained in and through the social interactions a learner participates in.
9. Dörnyei's L2 Motivational Self System constitutes an attempt to construct a composite theory of L2 motivation by distinguishing three components—the Ideal L2 Self, the Ought-to Self, and the L2 Learning Experience.

#### **4. Language anxiety**

Language anxiety is one of the key affective factors that has been shown to impact on L2 learning.

**Language anxiety** is the anxiety that results from learners' emotional responses to the learning conditions they experience in a specific situation. It differs from, but is related to, trait anxiety (i.e. the learner's overall tendency to be anxious as a result of their personality).

Much of the research has focused on the sources of language anxiety. Bailey (1983) analysed the diaries of 11 learners and found that they tended to become anxious when they compared themselves with other learners in the class and found themselves less proficient. Other sources of anxiety include being asked to communicate spontaneously in the second language, fear of negative evaluation, and tests. Horwitz, Horwitz, and Cope (1986) developed a questionnaire that has been widely used by researchers—the Foreign Language Classroom Anxiety Scale—based on these three major sources. Learners, however, differ in what they find anxiety-provoking. Horwitz (2001) noted that ‘in almost all cases, any task that was judged “comfortable” by some learners was also judged “stressful” by others’ (p. 118).

Researchers disagree about how anxiety affects language learning although the prevailing view is that high levels of anxiety impede learning.

However, anxiety can be both the result as well as the cause of poor achievement. Success in foreign language learning is primarily dependent on language aptitude and that students’ anxiety about learning an L2 is a consequence of the learning difficulties they experience because of deficits in their aptitude.

Language anxiety develops if learners have bad learning experiences. These have a debilitating effect on learning. High anxiety can impede learning because it interferes with the learners’ ability to process input in their working memory.

It would be a mistake to see low anxiety as a necessary condition for successful second language learning. In some cases, anxiety can be facilitative, driving learners to make more effort.

### **Language shock and culture shock**

Diary studies suggest that both language shock and culture shock are important for L2 learners, but whether they truly affect acquisition is yet another story. Jones (1977), in her own diary detailing her study of Indonesian in Indonesia, discussed language shock, culture shock, and general stress.

#### **Language shock**

*June 19*

*Friday night there was a dinner reception in our honor at the auditorium at school. After we ate dinner, a few of the professors got up and told “funny” stories about their experiences in the U.S. Then they wanted all of us to get up and do the same about our experiences in Indonesia. I politely refused, but Walt and Glenn got up. The guests not only laughed at the stories, but also at the awkward, nonfluent Indonesian used by them. I felt terribly embarrassed. The Indonesians did this because they honestly thought it would be funny and thought we would laugh too. I don’t laugh when they try to speak English and I don’t think it is funny when I make a mistake. This is one time where I feel I cannot get up and make a fool out of myself for others to laugh at because I wouldn’t think it was funny. I find that situations and embarrassment like this inhibits my ability to speak.*

*July 15*

*It seems as if all the young people my age laugh at my Indonesian pronunciation and lack of vocabulary. I don’t enjoy being laughed at, and I don’t think it is funny!! I am unable to reply to even simple sentences after incidents like these.*

## **Culture shock and rejection**

*July 15*

*The young married couples sit around with nothing to do and complain about how difficult life is or how tired they are. The young unmarried people don’t seem to carry on serious conversations with anyone and spend a lot of time in empty chatter.*

*July 18*

*I feel my language has deteriorated while I have been in Yogyakarta because of the way part of the family has behaved towards me. I have felt like an outsider and have rejected them. I am tired of the attitude of some of the family, laughing at me or being impatient with me in my attempt to learn their language.*

## **Stress**

*June 14*

*One of the professors is arranging for a play to be given by the participants. I have been cast in a play. I try to get myself out of it but Pak Soesanto (the professor) doesn’t seem to understand that I just don’t have enough time. I was advised to just not go to the first rehearsal, so I didn’t. The next day all the Indonesians connected with the play questioned me. I tried to explain that I had already talked with Pak Soesanto and that I didn’t have enough time but I don’t think they understand me. I just don’t have the vocabulary to adequately express myself and I feel so frustrated and embarrassed in not really being able to make myself completely understood.*

*June 19*

*I have gone downtown by myself. The biggest problem is how to ask for “thin” paper for airmail letters. I couldn’t make myself understood, so finally I just dropped the whole matter and went home without the paper. This really irritated me as I wanted to write some letters and finally had enough free time to do so.*

Anxiety and stress are also prevalent in classroom learning, as well as in individual learning contexts, as shown in the examples above. Bailey (1983) conducted a diary study of her own language-learning experience when studying French at the university. She made frequent journal entries chronicling her own experiences.

Bailey’s (1983) entries illustrate such phenomena as the role of self-esteem, competitiveness, and anxiety, as in the following quotations:

*I feel very anxious about this class. I know I am (or can be) a good language learner, but I hate being lost in class. I feel like I’m behind the others and slowing down the pace. (pp. 75–76). Today I was panicked in the oral exercise where we had to fill in the blanks with either the past definite or the imperfect. Now I know what ESL students go through with the present perfect and the simple past. How frustrating it is to be looking for adverbial clues in the sentence when I don’t even know what the words and phrases mean. I realized that the teacher was going around the room taking the sentences in order so I tried to stay one jump ahead of her by working ahead and using her feedback to the class to obtain confirmation or denial of my hypotheses. Today I felt a little scared. (p. 74)*

### **Time to Think ...**

*Task:* How do you think experiences with culture shock or language shock might affect language learning?

## **5. Social Distance**

A related concept to affect is social distance. There are many instances in which an L2 learner does not feel an affinity with the TL community. In such instances, learners create both a psychological distance and a social distance from speakers in the L2 community. An immediate consequence is that this results in a diminished amount of input. The realization of the significance of social (group) distance and psychological (individual) distance formed the basis of Schumann’s (1978a, 1978b) **Acculturation Model**. According to the precepts of this model, acculturation (the assimilation of the cultural traits of another group) is the causal

variable of SLA. That is, if learners acculturate, they will learn; if learners do not acculturate, they will not learn.

One of the social variables in the model that needs to be considered is the extent to which one group is dominant over another. One can think of situations in which an L2 group is dominant (e.g., colonization), or in which the L1 group is dominant (e.g., immigration). In the former case, learning is less likely to take place.

Another social situation to be considered is the extent to which a group integrates. In many immigrant communities, at least in the United States, there has been nearly total assimilation. In such situations, there is a high degree of learning. In others, there is emphasis on preserving one's own lifestyle and language. These situations result in language schooling for one's children in the home language. As a result of less contact, less learning occurs.

What kind of evidence might be adduced to support the Acculturation Model? Schumann based much of his original work on the language development (or lack thereof) of a 33-year-old Costa Rican man named Alberto (see Schumann, 1978).

*Alberto graduated from a Costa Rican high school where he had studied English for 6 years. He moved to Cambridge, Massachusetts, at age 33, where he lived with another Costa Rican couple. At his workplace, he was the only Spanish speaker in his department (although other NNSs of English were also employed at the same location). Significantly, he socialized primarily with other Costa Ricans. Alberto's development was followed for a period of 10 months, at the end of which he exhibited little knowledge of English. For example, he continued to place the negative marker before the verb (with no subjects), he did not invert questions, and inflections were minimal. After 10 months of exposure to English in an English-speaking environment, one would expect greater development. However, despite Alberto's claims that he did want to learn English, his actions suggested that he did not. He listened to Spanish music and he socialized and lived with Spanish speakers. Thus, he failed to acculturate in any significant way to the TL community and to speakers of the TL.*

According to the acculturation hypothesis, it is Alberto's lack of acculturation that resulted in his lack of linguistic development.

However, there is another learner, whose longitudinal development suggests that acculturation cannot be so closely linked to linguistic development. *Wes (studied by Schmidt, 1983) is a 33-year-old Japanese artist who moved to Hawai'i. He had every reason to want to be integrated into the Hawaiian community. First and foremost was the need to make a living,*

*but another important dimension of Wes is the fact that one of the reasons for moving to Hawai'i was "a general attraction to the people of Hawai'i." He had an American roommate and, for all intents and purposes, lived in an English-speaking world. However, his grammatical development was limited—although not to the same extent as Alberto's. The following is an example from Wes's speech (Schmidt, 1983, p. 168) (/ = pause breaks):*

*I know I'm speaking funny English / because I'm never learning / I'm only just listen / then talk / but people understand / well / some people confuse / before OK / but now is little bit difficult / because many people I'm meeting only just one time / you know demonstrations everybody's first time / sometime so difficult / you know what I mean? / well / I really need English more / I really want speak more polite English / before I'm always I hate school / but I need studying / maybe school / I don't have time / but maybe better / whaddya think? / I need it, right?*

Given that Wes realized that his English was “not right,” and given that he showed a desire to acculturate and that he appeared to have a desire to speak better English, it is difficult to justify the view that acculturation is the causal variable in SLA. Whereas there may be some personality variables that interact with the variable of acculturation, the data from Wes suggest that one cannot demonstrate a strong causal relationship between social and psychological distance and language learning. It is more accurate to consider distance and other variables discussed in this chapter as providing an impetus for learning, or perhaps even setting the stage for learning, but not as *causing* learning.

## 6. Extroversion and Introversion

The concepts of **extroversion** and **introversion** are commonly believed to be important in the understanding of L2 learning. The stereotype of an introvert is someone who is much happier with a book than with other people, whereas the stereotype of an extrovert is the opposite: someone happier with people than with a book.

These stereotypes have implications for L2 learning success, but the implications are somewhat contradictory. We might expect the introvert to do better in school. This has been borne out in research. For example, Skehan (1989) cited studies of British undergraduates showing a correlation of 0.25 between introversion and academic success. Nonetheless, the

gregariousness associated with extroverts would suggest that they would engage in more talking and social activity in an L2 and would thus learn the language better. Hence, there are good reasons to think that both extroversion and introversion lead to success in L2 learning, although in different ways.

Research data do not resolve this quandary, but show that extroverts are more fluent in L2 production, especially in stressful situation (Dewaele & Furnham, 1999). Evidence has been given in support of the advantages of extroversion (e.g., Chastain, 1975; Wong & Nunan, 2011) and introversion (Swain & Burnaby, 1976), and both, depending on the context and linguistic focus (van Daele et al., 2006; Zafar & Meenakshi, 2012), as well as with respect to this personality dimension and other individual differences such as strategy use (e.g., Wakamoto, 2009). It is probable that there is no correct global answer. The likely solution is that extroversion is beneficial for certain tasks and certain methods of language teaching, whereas introversion is beneficial for others.

### **Time to Think ...**

*Task:* Do you consider yourself an introvert? An extrovert? How do you think this affects your ability to learn another language? If you are a language teacher or plan on becoming a language teacher, do you think you do or will consider this distinction in the way you deal with your students? Why or why not?



## ***TASKS FOR SEMINARS: PSYCHOLOGICAL FACTORS AND SECOND LANGUAGE ACQUISITION***

Topics for discussion:

1. Key psychological factors and second language acquisition (cognitive, conative, affective).
2. Language aptitude.
3. Motivation. Theories of motivation.
4. Language anxiety.
5. Culture shock.
6. Social distance.
7. Extroversion and introversion.

1. Are you a good language learner? Which individual differences have helped you in your L2 studies?

Are there any individual differences of yours that may have hindered your L2 progress?

2. Consider the notion of ability in language learning. How does ability play a role in accounting for final SLA outcomes?

3. In considering aptitude, how would we account for the uniform success of children in learning an L1?

4. How can we find valid measures of language aptitude, language ability, motivation, and personality characteristics? If there is always some difficulty and controversy over these measures, will we ever be able to put the entire picture of SLA into one coherent framework? If so, how?

5. Look at these sample questions from a version of the MLAT (see Link #1 in the Links section at the end of the chapter). Did you find the questions difficult? Which section was the easiest? The hardest? Can you make any conclusions about how you might perform on the MLAT were you to take the whole test? Do these questions measure language-learning aptitude in your opinion? Why or why not?

6. Spell out the developments in the motivation research by writing a plan first.

7. Assume roles of representatives of different schools of thought in the motivation research. Suggest arguments in favour of your stance.

8. What are some examples of learning a foreign language in an *integrative* orientation and in an *instrumental* orientation? Offer further examples of how within both orientations one's

motivation might be either high or low. Is one orientation necessarily better than another? Think of situations where either orientation could contain powerful motives.

9. In pairs, make a quick list of activities or other things that happen in a foreign language class. Then decide whether each activity fosters *extrinsic* motivation or *intrinsic* motivation, or degrees of each type. Through class discussion, make a large composite list. Which activities seem to offer deeper, more long-term success?

10. Think of some techniques or activities that you have experienced in learning a foreign language and then, as a group, pick one or two and analyze them in terms of each of the points on the checklist for intrinsically motivating **techniques**. Report your findings to the rest of the class.

1. Does the activity appeal to the genuine interests of your students? Is it relevant to their lives?

2. Do you present the activity in a positive, enthusiastic manner?

3. Are students clearly aware of the purpose of the activity?

4. Do students have some choice in (a) choosing some aspect of the activity and/or (b) determining how they go about fulfilling the goals of the activity?

5. Does the activity encourage students to discover for themselves certain principles or rules (rather than simply being "told")?

6. Does it encourage students in some way to develop or use effective strategies of learning and communication?

7. Does it contribute—at least to some extent—to students' ultimate autonomy and independence (from you)?

8. Does it foster cooperative negotiation with other students in the class? Is it a truly interactive activity?

9. Does the activity present a "reasonable challenge"?

10. Do students receive sufficient feedback on their performance (from each other or from you)?

11. In this lecture, we discussed the concept of differential success rates. We can use a measure that is easy to obtain: course grades. What do you think of this measure, especially related to the statement that success in getting good grades in language learning is not necessarily equal to "really learning" an L2? What do you think of the conclusion that success in getting good grades in a foreign-language classroom correlates well with getting good grades in any subject?

12.If personality types can affect one's ability to learn an L2, what implications might there be for teaching? That is, would learning be more successful if like learners were put in a classroom with a like teacher and a conducive methodology (e.g., one that requires significant analysis)? Why or why not?

13.Divide into pairs or groups for the following discussion. Each group should take one of the following factors: language aptitude, motivation, anxiety, culture shock, social distance and extroversion/introversion.

In your group, (a) define each factor and (b) agree on a generalized conclusion about the relevance of each factor for successful second language acquisition. In your conclusion, be sure to consider how your generalization needs to be qualified by some sort of "it depends" statement. For example, one might be tempted to conclude that low anxiety is necessary for successful learning, but depending on certain contextual and personal factors, facilitative anxiety may be helpful. Each group should report back to the rest of the class.

14.Several students could be assigned to find tests of self-esteem, empathy, anxiety, extroversion, motivation etc., and bring copies of these self-rating tests to class for others to examine or take themselves. Follow-up discussion should include an intuitive evaluation of the validity of such tests.

#### PART 1 - HIDDEN WORDS

Part 1 of the MLAT - E has 30 items. This part of the MLAT -

E requires the ability to associate sounds with symbols and depends somewhat on knowledge of English vocabulary. Each question below has a group of words. The word at the left of the group is not spelled in the usual way. Instead, it is spelled approximately as it is pronounced. The task of the pupil is to recognize the disguised word from the spelling. He or she needs to select one of the four words beside it that corresponds most closely in meaning to the disguised word.

1. wntr      champion      season  
liquid      happy
2. klen      brave      group of people  
a person who rules      not dirty
3. pensl      used for writing      type of boat  
large bird      money
4. snak      hard wood      to tease  
reptile      type of shoe

#### PART 1 - HIDDEN WORDS

Correct Answers:

1. wntr is a disguised spelling of winter, which is a season
2. klen is a disguised spelling of clean, which corresponds in meaning to not dirty
3. pensl is a disguised spelling of pencil, which is used for writing

4. snak is a disguised spelling of snake, a kind of reptile

## PART 2 - MATCHING WORDS

There are 30 questions in MLAT -

E Part 2. The questions test recognition, analogy, and understanding of a far greater range of syntactic structures than the 4 sample questions shown here. Although knowledge of grammatical relationships is measured in this part, no explicit reference is made to grammatical terminology, so grammatical sensitivity is measured without measuring grammatical knowledge gained through formal instruction.

In each of the following questions, we call the first sentence the key sentence. One word in the key sentence will be underlined and printed in capital letters. The task is to select the word in the second sentence that plays the same role in that sentence as the underlined word in the key sentence.

1. Yesterday, Mary caught a FISH at the lake.

Cindy cut a cake with a knife.

2. Amy SANG a pretty song to her class.

James throws big rocks into the lake.

3. Peter got an ORANGE cat for his birthday.

My sister ate a big apple on Wednesday. ....

4. The furry DOG barked at us as we walked by.

Did John go to the store to get bread?

## PART 2 - MATCHING WORDS

Correct Answers:

1. A mark would be put in the box beneath cake. In the first sentence, something was caught, and the thing that was caught was a FISH. In the second sentence, something was cut, and that thing was a cake.

2. A mark would be put in the box beneath throws because SANG in the first sentence and throws in the second sentence are both the action that occurs.

3. A mark would be put in the box beneath big because ORANGE in the first sentence describes the cat and big in the second sentence describes an apple.

4. A mark would be placed in the box beneath John because the first sentence is about a DOG and the second sentence is about John.

## PART 3 - FINDING RHYMES

There are 40 items in Part 3 of the MLAT - E. This portion of the test measures the pupil's ability to hear and make distinctions between speech sounds. Some knowledge of English vocabulary is required for this part. In each of the questions below, the word in CAPS is called the stimulus. The pupils are asked to mark the box next to the word that best rhymes with the stimulus.

1. TIME tame tide dime shin

2. RAIN vine cane keen fine

3. MEET beat mate keep might

4. ROOT foot but fruit book

## PART 3 - FINDING RHYMES

Correct Answers:

1. dime
2. bane
3. feat
4. fruit

#### PART 4 - NUMBER LEARNING

Part 4 of the MLAT - E has 25 possible points. This part of the MLAT -

E tests auditory and memory abilities associated with sound -

meaning relationships. In this part of the MLAT -

E, the pupil will learn the names of numbers in a new language. Subsequently, he or she will hear the names of numbers spoken aloud, and will be asked to write down these numbers. For example, if you heard someone say the number "seventeen" in English, you would write down 17. But in this test, the pupil will hear the numbers in a new language. Here is how it will work:

The pupil will hear some instructions read aloud. The speaker will then teach him or her some numbers. The speaker will say something like:

[The red text represents the voice heard by the pupil.]

Now I will teach you some numbers in the new language. First, we will learn some single-digit numbers:

"ba" is "one"

"baba" is "two"

"dee" is "three"

Now I will say the name of the number in the new language, and you write down the number you hear. Try to do so before I tell you the answer:

"ba" That was "one"

"dee" That was "three"

"baba" That was "two"

Now we will learn some two-digit numbers:

"tu" is "twenty"

"ti" is "thirty"

"tu - ba" is "twenty - one" in this language - - because "tu" is "twenty" and "ba" is "one".

"ti - ba" is "thirty - one" because "ti" is "thirty" and "ba" is one.

Now let's begin. Write down the number you hear.

- a. ti - ba [you have only about 5 seconds to write down your answer]
- b. ti - dee
- c. baba
- d. tu - dee

#### PART 4 - NUMBER LEARNING

Correct Answers:

- a. 31
- b. 33
- c. 2

d. 23

### **SUGGESTED READINGS**

Gass S. 4<sup>th</sup> ed. (2013). Second Language Acquisition: An Introductory Course (p. 339 -493).

Ellis R. (2015). Understanding Second Language Acquisition. (topic 2, p.64-95).

Brown D. (2007). Principles of language learning and teaching (p.152-185).

## Theme 9: Neurolinguistics and Multilingualism

1. Languages and the brain
2. Organization of multiple languages in the brain
3. The effects of multilingualism

### 1. Languages and the brain

Study of languages and the brain is based on the framework provided by **neurolinguistics**, which seeks to answer questions about how the location and organization of language might differ in the heads of monolingual versus multilingual speakers, and of multilinguals who acquire second languages at different ages or under differing circumstances. It primarily addresses *what* is being acquired in a physical sense: what is added or changed in the neurological “wiring” of people’s brains when they add another language?

Notions that particular locations in the brain may be specialized for language functions date back at least into the nineteenth century. Paul Pierre **Broca** (1861, 1865) observed that an area in the left frontal lobe (Broca’s area) appeared to be responsible for the ability to speak and noted that an injury to the left side of the brain was much more likely to result in language loss than was an injury to the right side. Wernicke (1874) further identified a nearby area which is adjacent to the part of the cortex that processes audio input ( Wernicke’s area ) as also being central to language processing. Some exceptions have been found, but for the vast majority of individuals, language is represented primarily in the left half (or hemisphere) of the brain within an area (including both Broca’s area and Wernicke’s area) around the Sylvian fissure (separates lobes in the brain). Subsequent research has shown that many more areas of the brain are involved in language activity than was thought earlier: language activity is not localized, but core linguistic processes are typically housed in the left hemisphere.

Such specialization of the two halves of the brain is known as **lateralization**, and is present to some extent even in infancy. There is increased specialization as the brain matures

and has less **plasticity**: i.e. one area of the brain becomes less able to assume the functions of another in the event it is damaged. **Lenneberg** (1967) proposed that children had only a limited number of years during which they could acquire their L1 flawlessly if they suffered brain damage to the language areas; brain plasticity in childhood would allow other areas of the brain to take over the language functions of the damaged areas, but beyond a certain age, normal language would not be possible. This is the **Critical Period Hypothesis**.

Communicative functions for which each hemisphere of the brain is primarily specialized are listed in Table 4.1 , as suggested by L1 research reviewed in Obler and Gjerlow ( 1999 ).

Table 4.1 Principal communicative specializations of L and R hemispheres

<i>Principal hemispheric specializations</i>	
<i>Left hemisphere</i>	<i>Right hemisphere</i>
Phonology	Nonverbal (as babies' cries)
Morphology	Visuospatial information
Syntax	Intonation
Function words and inflections	Nonliteral meaning and ambiguity
Tone systems	Many pragmatic abilities
Much lexical knowledge	Some lexical knowledge

In discussing hemispheric specialization, Obler and Gjerlow emphasize that, “while localizing language phenomena in the brain is the eventual goal of neurolinguistics, we no longer expect that there are language areas that are entirely 'responsible' for language, or even 'dominant' for language, to be contrasted with areas that have nothing to do with it” (1999:11–12).

Hemispheric specialization for language is the same regardless of whether the language is spoken or not; core linguistic functions for sign languages used in deaf communities are also located in the left hemisphere. The visuospatial information listed for the right hemisphere in



Table 4.1 refers to movement which may be meaningful but is nonlinguistic in nature. When movement incorporates linguistic units of phonology, morphology, and syntax (as in sign language), it is left-hemisphere based (Emmorey 2002 ). The typical distribution of primary functions is probably due to the left hemisphere's being computationally more powerful than the right and therefore better suited for processing the highly complex elements of language.

Interest in how the brain might be organized for multiple languages also dates back to the nineteenth century (e.g. Freud 1891 ). The initial questions arose from observing differing patterns for the interruption and recovery of languages following brain damage in multilinguals. Most individuals lose or recover multiple languages equally (Paradis 1987 ), but some recover one before the other, and some never recover use of one (either L1 or L2). These findings suggest that two or more languages may be represented in somewhat different locations in the brain and/or have different networks of activation. This possibility has stimulated observation and research on the topic for the past century, although research procedures have changed radically with changing technology.

## **2. Organization of multiple languages in the brain**

In spite of many years of research, some questions remain unanswered or answers remain controversial. In part this is because study has generally involved limited numbers of subjects and there is considerable individual variation in how the brain is “wired”; in part it is because research efforts have not used the same procedures for data collection and analysis and therefore do not yield entirely comparable results. Still, there are a number of findings which shed increasing light on the representation and organization of multiple languages in the brain. Specific questions which have been explored are listed below, along with a brief summary of results from some of the research conducted on them.

### **1. How independent are the languages of multilingual speakers?**

There is no single answer to this question, both because there appears to be considerable individual variation among speakers, and because there are very complex factors which must

be taken into account. It seems reasonable to conclude, however, that multiple language systems are neither completely separate nor completely fused.

Ervin and Osgood (1954) suggested a three-way possibility for how languages relate in an individual's mind, which are called coordinate, compound, and subordinate bilingualism. **Coordinate** refers to parallel linguistic systems, independent of one another; compound to a fused or unified system; and **subordinate** to one linguistic system accessed through another. These different relationships result in part because of different contexts for language learning. An extreme case of coordinate bilingualism would be the rare individual who has learned two or more languages in different contexts and is not able (even with conscious effort) to translate between them. More common would be **compound bilingualism**, believed by many to characterize simultaneous bilingualism in early childhood (before the age of three years), and subordinate bilingualism, believed to result from learning L2 through the medium of L1 (as in grammar-translation approaches to foreign language instruction). There is evidence that suggests the relationship may depend on L2 proficiency, changing from compound or subordinate to coordinate at higher knowledge and skill levels (Kroll and Stewart 1994).

Other researchers stress the interdependence of languages, although separation can be maintained for many purposes. Obler and Gjerlow conclude that multiple linguistic systems “are only as independent as necessary, and reliance on a single system is the rule whenever possible” (1999 :140). Recent studies have focused on evidence for two distinct memory systems, which may involve different representations of L1 and L2 grammars (see e.g. review in Green 2008 ).

2. How are multiple language structures organized in relation to one another in the brain? Are both languages stored in the same areas?

Again, there is considerable variation among speakers. For at least some multilinguals, it appears that L1 and L2 are stored in somewhat different areas of the brain, but both are predominantly in areas of the left hemisphere. However, the right hemisphere might be more involved in L2 than in L1.

Researchers have stimulated certain segments of the brain during surgery (Ojemann and Whitaker 1978 ) and found that disturbing some points in the brain blocks people from being able to name things in both languages, while disturbing other points does not have this effect. The area common to both L1 and L2 storage is near the Sylvian fissure in the left hemisphere, but only L1 or L2 (more likely L2) is disrupted by stimulation of points further away from the Sylvian fissure. Using PET-scan imaging on one Spanish–English subject in repetition tasks, Fedio et al. ( 1992 ) also found more diffuse brain activation for L2 than for L1, and different areas involved, which the authors interpreted as indicating that greater memorization of words and phrases is involved in L2 (as opposed to direct processing of words for meaning in L1).

3. Does the organization of the brain for L2 in relation to L1 differ with age of acquisition, how it is learned, or level of proficiency?

The answer is probably “yes” to all three, with the strongest body of evidence showing that age of acquisition influences brain organization for many second language learners.

After reviewing research on lateralization in bilinguals, Vaid (1983) concludes that individuals who acquire L2 later in life show more right hemisphere involvement. Supporting this conclusion, Wuillemin and Richards (1994) report more right-hemisphere involvement for individuals who acquire L2 between ages nine and twelve than for those who acquire L2 before age four. Cook suggests that how people learn languages might be a factor: “The variation in right hemisphere involvement may be due to the lack of a single route to L2 knowledge: second languages may be learnt by many means rather than the single means found in L1 acquisition and, consequently, may have a greater apparent hemispheric spread” (1992:572). Hull and Vaid (2007) also report on the significance of amount and duration of L1 and L2 exposure.

4. Do two or more languages show the same sort of loss or disruption after brain damage? When there is differential impairment or recovery, which language recovers first?

As noted in the first part of this section, brain damage results in the same or very similar patterns of loss and recovery for both/all of most multilingual persons’ languages, but many exceptions have been reported. One early hypothesis was that in cases of such brain damage,

the last-learned language would be the first lost, the next-to-the-last learned the second to be lost, and so forth, with L1 the last to remain; recovery was speculated to be L1 first. This in fact does not appear to occur at a level greater than chance, at least with respect to order of recovery. Obler and Gjerlow ( 1999 ) conclude rather that a significant factor in initial recovery is which language was most used in the years prior to the incident which caused the damage, whether this is L1 or L2.

Research on this question also shows that not only can different languages be affected differentially by brain damage, but different abilities in the same language may be differentially impaired: e.g. syntax versus vocabulary, production versus comprehension, or oral versus written modality. These observations have possible implications for claims that different elements of language are located in separate parts of the brain.

We may conclude that what is being added in the brain when a second language is acquired is not very different from, nor usually entirely separate from, what is already there for the first. But there are intriguing differences: some differences may be due to level of L2 proficiency, some to circumstances of L2 learning, and some to the fact that our brains are not “wired” in exactly the same way. Research on this focus is expanding rapidly with the help of brain-imaging technology, and it promises also to contribute more neurological answers to questions of how second languages are learned and why some people are more successful than others.

### **3. The effects of multilingualism**

The possible gains/costs of multilingualism in relation to other cognitive faculties have been studied for many years. The strength of positive versus negative perceptions of the relationship has shifted over time, and this shift has been attributable as much to philosophical and political factors as to scientific findings.

Philosophically, the notion that multilingualism has positive effects on cognitive development was traditionally related to the belief that foreign language study (especially Greek and Latin) is good for “training the mind”; there is still an assumption in many parts of

the world that multilingualism is an essential characteristic of “educated” and “cultured” members of society.

The opposite notion, that multilingualism has a negative impact on general intelligence, perhaps reached its zenith in US-based research on immigrants during the 1930s, motivated by increasingly isolationist political sentiments at that time, and based on the low scores of immigrants who spoke languages other than English natively on the standardized tests of intelligence which then were coming into widespread use. (The point was not made until some years later that these tests were being administered in a language which the subjects did not speak fluently or understand well, and that the individuals were not being tested in their native languages.)

Research since the 1960s has largely supported claims that multilingualism has positive effects on intellectual functions, based on “measures of conceptual development, creativity, metalinguistic awareness, semantic development, and analytic skills” (Diaz 1985 :18). The following list is a summary of positive findings (Diaz and Klingler 1991 :184):

- Bilingual children show consistent advantages in tasks of both verbal and nonverbal abilities.
- Bilingual children show advanced metalinguistic abilities, especially manifested in their control of language processing.
- Cognitive and metalinguistic advantages appear in bilingual situations that involve systematic uses of the two languages, such as simultaneous acquisition settings or bilingual education.
- The cognitive effects of bilingualism appear relatively early in the process of becoming bilingual and do not require high levels of bilingual proficiency nor the achievement of balanced bilingualism.
- Bilingual children have advantages in the use of language for verbal mediation, as shown by their higher frequency of private-speech utterances and their larger number of private-speech functions.

Recent attention has focused most on the positive effects that bilingualism appears to have on memory. This holds true both for children and for aging adults (e.g. Kormi-Nouri, Moniri, and Nilsson 2003 ; Bialystok, Craik, Klein & Viswanathan 2004 ).

Relatively recent negative claims regarding multilingualism have primarily addressed capacity limitations for language acquisition and maintenance, with evidence that simultaneous bilingualism in childhood may result in a narrower range of lexical development in either language, and that intensive and continued use of L2 may reduce accessibility of L1. Common and stable multilingualism among populations in many parts of the world, however, suggests that whatever limitations there may be are not biological in nature.

Most interesting here is that, whether evidence is positive or negative (and it is generally positive), there are differences in the way multilinguals perform cognitive tasks. A person who knows more than one language can perceive and experience the world through more than one lens: “Both negative and positive effects are signs that L2 users think differently from monolinguals . . . Multicompetence is a different state of mind” (Cook 1992 :565). Accounting for the differences remains one of the most intriguing challenges for psychological approaches to SLA.

## **Summary**

Psychological perspectives on what is acquired in SLA concentrate on additions or changes that occur in neurological makeup, and on how the multilingual brain is organized. We have seen that the physical representation of the second language in the brain is not very different from the first, but there are differences in brain organization which relate to how proficient people are in L2, and to how they learned it. In contrast to Chomsky’s proposal that there is a specific Language Acquisition Device (LAD), the psychologists generally view how second languages are learned as involving the same processes as the acquisition of other areas of complex knowledge and skills: i.e. “learning is learning.” Some consider the processes to be largely a matter of abstracting rules or principles, and some to be more a physical neurological development of associative networks and connections. The question of why some learners are

more successful than others leads to the examination of differences in the learners themselves. We find that language-learning outcomes are influenced by age, aptitude, and motivation. Other factors in individuals' learning styles and strategies correlate with degree of success in SLA, but we can be much less sure of claims for cause–effect relationships. Humans are inherently social creatures, and it is difficult to assess individual cognitive factors in language learning apart from the influence of the learner's total social context.

## ***TASKS FOR SEMINAR: NEUROLINGUISTICS AND MULTILINGUALISM***

Topics for discussion:

1. Languages and the brain
2. Organization of multiple languages in the brain
3. The effects of multilingualism

### **Activities**

Questions for self-study

1. Match the following areas of SLA theory and research to their descriptions:

- |                        |  |
|------------------------|--|
| 1. learning processes  | a. considers aptitude in learning, how learning is linked to age and sex, and addresses why some second language learners are more successful than others  |
| 2. neurolinguistics    | b. studies the stages and sequences of language acquisition, addressing how acquisition happens  |
| 3. learner differences | c. studies how the location and organization of language might differ in the heads of monolingual versus multilingual speakers, addressing what is added and changed in people's brains when they learn another language |

2. Broca's area is responsible for the ability to \_\_\_\_\_, whereas Wernicke's area is responsible for processing \_\_\_\_\_.

3. Match the following terms to the situation that illustrates each:

- |                             |  |
|-----------------------------|--|
| 1. coordinate bilingualism  | a. Maria speaks French and English fluently, and often speaks "Frenglish," a mixture of French and English, with her other bilingual friends. She produces and understands this mixture of languages easily. |
| 2. subordinate bilingualism | b. Ursula speaks French and German fluently, but cannot switch readily between   |



the two. She must speak all German with you, or all French, even if you both know both languages.

### 3. compound bilingualism

c. Shane speaks English natively and German as an L2. Each time he learns something new in German, he translates it into English to memorize the literal translation and compare it to the English meaning and structure.

4. Input is considered whatever sample of L2 that learners are exposed to. However, according to the Information Processing framework, what must learners do to make this input available for processing? What is the term for this kind of input?

5. Swain contends that \_\_\_\_\_ is necessary for successful L2 learning because it helps develop automaticity through practice and because it helps learners notice gaps in their own knowledge.

6. \_\_\_\_\_ motivation involves emotional or affective reasons for learning an L2, such as an intention to participate or integrate in the L2 speech community. \_\_\_\_\_ motivation involves a purely practical reason for learning, such as better job opportunities or passing required courses in school.

### *Active learning*

1. If you have learned any second languages, at what age did you begin learning them? Are you more successful now in languages that you were exposed to earlier? Based on your personal experience, what do you think of the Critical Period Hypothesis? Do you know others whose experiences would support or refute it?

2. Some studies define “success” in L2 acquisition per the initial rate of learning, some define it per the ultimate achievement, whereas others define it based upon how closely a learner comes to native-like pronunciation, or grammaticality judgments similar to a native speaker’s. How do you define “success” in L2 acquisition in general as compared to how you define it for yourself? Is your definition of success in L2 learning the same as the standards by which you are judged, or do the members of your L2 speech community (teachers, classmates, colleagues, friends, etc.) have different definitions of success in L2 learning than you do?

3. It is postulated that younger learners are probably more successful in informal and naturalistic learning contexts, and older learners are more successful in formal instructional

settings. Do you agree or disagree? Use your own experience combined with theoretical support from this chapter to make your argument.

## THEME 10: LANGUAGE LEARNING STYLES AND STRATEGIES

1. Learning Styles.
2. Learning Strategies.

*Task:* Read the instances of application of strategies by different language learners. What is their ultimate goal?

Which of the strategies described have you ever tried using? How effective do you think they are?

*In learning ESL, Trang watches TV soap operas from the United States, guessing the meaning of new expressions and predicting what will come next. Feng-ji memorizes pages of words from an English dictionary and breaks the words into their components. Amany meets with an English-speaking conversation partner for lunch three times a week. Haruko arranges to live with an American family so she can learn the culture and language in a fulltime immersion situation. Masha tapes English labels to all the objects in her dorm room. Marcel practices song lyrics in English, moving freely to the music while singing. Luis regularly reads Newsweek, the New York Times, Parade, and even American comic books. Boris draws pictures of new words and creates flow charts showing how they fit together semantically. Marie-France uses a green highlighting pen to mark the main points in the notes she takes in class, and later she outlines the notes and writes a summary. Jing-Mei, who is afraid to speak English, encourages herself by using positive affirmations and selfpraise. Hermann keeps a diary to evaluate his daily performance in learning English.*

Language learning styles and strategies are among the main factors that help determine how – and how well –our students learn a second or foreign language.

Definition:

**Learning styles** are the general *approaches* –for example, global or analytic, auditory or visual –*to learning a new language*. These styles are “the overall patterns that give general direction to learning behavior” (Cornett, 1983,p. 9). **Strategies** are the specific *behaviors or thoughts learners use to enhance their language learning*.

### 1. Learning Styles

Learning styles generally operate on a continuum. For example, a person might be more extraverted than introverted, or more closure-oriented than open, or equally visual and auditory but with lesser kinesthetic and tactile involvement.

#### **Sensory Preferences**

Sensory preferences can be: *visual, auditory, kinesthetic (movement-oriented), and tactile (touch-oriented)*.

Visual students like to read and obtain a great deal from visual stimulation. For them, lectures, conversations, and oral directions without any visual backup can be very confusing. In contrast, auditory students are comfortable without visual input and therefore enjoy and profit from lectures, conversations, and oral directions. Kinesthetic and tactile students like lots of movement and enjoy working with objects and flashcards. Sitting at a desk for very long is not for them; they prefer to have frequent breaks and move around the room.

### ***Personality Types***

Another style aspect that is important for L2 education is that of personality type, which consists of four strands: *extraverted vs. introverted*; *intuitive-random vs. sensing-sequential*; *thinking vs. feeling*; and *closure-oriented/judging vs. open/perceiving*.

Personality type (often called psychological type) is a construct based on the work of psychologist Carl Jung.

#### ***Extraverted vs. Introverted.***

Extraverts gain their greatest energy from the external world. They want interaction with people and have many friendships. In contrast, introverts derive their energy from the internal world, seeking solitude and tending to have just a few friendships.

Extraverts and introverts can learn to work together with the help of the teacher. Enforcing time limits in the L2 classroom can keep extraverts' enthusiasm to a manageable level. Rotating the person in charge of leading L2 discussions gives introverts the opportunity to participate equally with extraverts.

#### ***Intuitive-Random vs. Sensing-Sequential.***

Intuitive-random students think in abstract, futuristic, large-scale, and nonsequential ways. They like to create theories and new possibilities, often have sudden insights, and prefer to guide their own learning. In contrast, sensing-sequential learners are grounded in the here and now. They like facts rather than theories, want guidance and specific instruction from the teacher, and look for consistency. The key to teaching both intuitive-random and sensing-sequential learners is to offer variety and choice: sometimes a highly organized structure for sensing-sequential learners and at other times multiple options and enrichment activities for intuitive-random students.

#### ***Thinking vs. Feeling.***

Thinking learners are oriented toward the stark truth. They want to be viewed as competent and do not tend to offer praise easily. Sometimes they seem detached. In comparison, feeling learners value other people in very personal ways. They show empathy and compassion through words, not just behaviors, and say whatever is needed to smooth over difficult situations.

#### ***Closure-oriented/Judging vs. Open/Perceiving.***

Closure-oriented students want to reach judgments or completion quickly and want clarity as soon as possible. These students are serious, hardworking learners who like to be given written information and enjoy specific tasks with deadlines. (Ehrman & Oxford, 1989).

In contrast, open learners take L2 learning less seriously, treating it like a game to be enjoyed rather than a set of tasks to be completed. Open learners dislike deadlines; they want to have a

good time. Open learners sometimes do better than closure-oriented learners in developing fluency (Ehrman & Oxford, 1989), but they are at a disadvantage in a traditional classroom setting.

#### *Global or holistic*

This strand contrasts the learner who focuses on the main idea or big picture with the learner who concentrates on details. **Global or holistic** students like socially interactive, communicative events in which they can emphasize the main idea and avoid analysis of grammatical structures. **Analytic** students tend to concentrate on grammatical details and often avoid more free-flowing communicative activities.

### **Biological Differences**

Differences in L2 learning style can also be related to biological factors. Biorhythms reveal the times of day when students feel good and perform their best. Some L2 learners are morning people (**larks**), while others do not want to start learning until the afternoon, and still others are creatures of the evening (**owls**).

Sustenance refers to the need for food or drink while learning. Quite a number of L2 learners do not feel comfortable learning without a candy bar, a cup of coffee, or a soda in hand, but others are distracted from study by food and drink.

Location involves the nature of the environment: temperature, lighting, sound, and even the firmness of the chairs.

#### *Beyond the Stylistic Comfort Zone*

L2 learners clearly need to make the most of their style preferences. However, occasionally they must also extend themselves beyond their style preferences. By providing a wide range of classroom activities that cater to different learning styles, teachers can help L2 students develop beyond the comfort zone dictated by their natural style preferences. The key is systematically offering a great variety of activities within a learner-centered, communicative approach.

## **2. Learning Strategies**

**Definition:** *L2 learning strategies are specific behaviors or thought processes that students use to enhance their own L2 learning.*

The word strategy comes from the ancient Greek word *strategia*, which means steps or actions taken for the purpose of winning a war.

*What makes a strategy positive and helpful for a given learner?*

- (a) the strategy is suitable for the L2 task at hand,
- (b) the strategy fits the particular student's learning style preferences
- (c) the student employs the strategy effectively and links it with other relevant strategies.

Strategies that fulfill these conditions “make learning easier, faster, more enjoyable, more self directed, more effective, and more transferable to new situations” (Oxford, 1990, p. 8).

Learning strategies can also enable students to become more independent, autonomous, lifelong learners (Allwright, 1990; Little, 1991).

Yet students are not always aware of the power of consciously using L2 learning strategies for making learning quicker and more effective (Nyikos & Oxford, 1993). Skilled teachers help their students develop an awareness of learning strategies and enable them to use a wider range of appropriate strategies.

### **Strategy Use Often Relates to Style Preferences**

When left to their own devices, students typically use learning strategies that reflect their basic learning styles (Ehrman & Oxford, 1989; Oxford, 1996a, 1996b). However, teachers can actively help students “stretch” their learning styles by trying out some strategies that are outside of their primary style preferences.

#### ***Positive Outcomes from Strategy Use***

the use of learning strategies is related to student achievement and proficiency. students who frequently employ learning strategies enjoy a high level of self-efficacy, i.e., a perception of being effective as learners (Zimmerman & Pons, 1986).

### **Main Categories of L2 Learning Strategies**

**Cognitive strategies** enable the learner to manipulate the language material in direct ways, e.g., through *reasoning, analysis, note-taking, summarizing, synthesizing, outlining, reorganizing* information to develop stronger schemas (knowledge structures), practicing in naturalistic settings, and *practicing structures and sounds formally*.

**Metacognitive strategies** (e.g., *identifying one’s own learning style preferences and needs, planning for an L2 task, gathering and organizing materials, arranging a study space and a schedule*, monitoring mistakes, and evaluating task success, and evaluating the success of any type of learning strategy) are employed for managing the learning process overall.

**Memory-related strategies** help learners link one L2 item or concept with another but do not necessarily involve deep understanding. Various memory-related strategies enable learners to learn and retrieve information in an orderly string (e.g., *acronyms*), while other techniques create learning and retrieval via sounds (e.g., *rhyming*), images (e.g., *a mental picture of the word itself or the meaning of the word*), a combination of sounds and images (e.g., the keyword method), body movement (e.g., total physical response), mechanical means (e.g., flashcards), or location (e.g., on a page or blackboard).

**Compensatory strategies** (e.g., guessing from the context in listening and reading; using synonyms and “talking around” the missing word to aid speaking and writing; and strictly for speaking, using gestures or pause words) help the learner make up for missing knowledge.

**Affective strategies**, such as *identifying one’s mood and anxiety level, talking about feelings, rewarding oneself for good performance, and using deep breathing or positive selftalk*, have been shown to be significantly related to L2 proficiency.

**Social strategies** (e.g., asking questions to get verification, asking for clarification of a confusing point, asking for help in doing a language task, talking with a native-speaking

conversation partner, and exploring cultural and social norms) help the learner work with others and understand the target culture as well as the language.

## ***TASKS FOR SEMINAR: LEARNING STYLES AND STRATEGIES***

### *Topics for discussion:*

1. Learning styles.
2. Learning strategies.

### *Discussion Questions*

1. What is the difference between learning styles and learning strategies?
2. How are learning styles and strategies related?
3. Why are learning styles and strategies important for L2 teachers to understand?
4. What do we know about “optimal” strategy instruction?
5. Note-taking is sometimes thought of as an academic survival skill. What criteria would need to be present to make note-taking an actual learning strategy?

### *Activities*

1. Find a published learning style instrument and administer it to yourself. Score it. What kind of learner are you?
2. Write down ways that your learning style affects your teaching. Compare your findings with those of a colleague or friend. Consider in what ways you can build flexibility into your instruction to meet the needs of your students.
3. Take a strategy survey, responding according to the most recent L2 you have learned (or to which you have been exposed). What are your patterns of strategy use? Which categories of strategies do you use the most, and which do you use the least? Consider why this is so.
4. Activities from “Learning Style Survey” [http://carla.umn.edu/maxsa/documents/LearningStyleSurvey\\_MAXSA\\_IG.pdf](http://carla.umn.edu/maxsa/documents/LearningStyleSurvey_MAXSA_IG.pdf)

### *Literature:*

- Cohen, A.D., 1998: *Strategies in Learning and Using a Second Language*. Essex, U.K.: Longman.
- Ehrman, M., 1996: *Second Language Learning Difficulties: Looking Beneath the Surface*. Thousand Oaks, CA: Sage.
- O'Malley, J.M. & Chamot, A.U., 1990: *Learning Strategies in Second Language Acquisition*. Cambridge, U.K.: Cambridge University Press.
- Oxford, R.L., 1990: *Language Learning Strategies: What Every Teacher Should Know*. Boston: Heinle & Heinle.
- Oxford, R.L., 1996. *Language Learning Strategies Around the World: Cross-cultural Perspectives*. Manoa: University of Hawaii Press.
- Reid, J., 1995: *Learning Styles in the ESL/EFL Classroom*. Boston: Heinle & Heinle.



## **Vocabulary review**

Write brief definitions for each of the following terms, in preparation for the final quiz.

The Input Hypothesis

The Acquisition/Learning Hypothesis

The Monitor Hypothesis

The Affective Filter Hypothesis

The Natural Order Hypothesis

The Contrastive Analysis Hypothesis

The Interaction Hypothesis

The Output Hypothesis

The Cognition Hypothesis

negative transfer

errors versus mistakes

overt and covert errors

avoidance

overgeneralization

variability due to situational/linguistic and psycholinguistic context

interlanguage

fossilization

pidgin languages

creole languages

The Acculturation Model

Foreigner talk

Modified interaction

Clarification requests

Comprehension checks

Recasts

The Interaction Hypothesis

Markedness

Typological Universals

noticing

implicit and incidental learning

triggering

Universal Grammar

the Critical Period

Satellite framed and verb framed languages

Aptitude

The MLAT

Integrative motivation

The AMTB

Output anxiety

Learning strategies

analytic v. synthetic syllabuses

Focus on Form

Which of the above words/theories are the following researchers associated with (some of these may be associated with more than one word or theory).

Larry Selinker

Stephen Krashen

Richard Schmidt

John B. Carroll

Michael Long

Robert Lado

John Schumann

Noam Chomsky

## Literature:

### Basic

1. Brown, D. (2007). *Principles of language learning and teaching*. White Plains, N.Y.: Pearson Education.
2. Cook, V. (2008). *Second language learning and language teaching*. London: Hodder Education.
3. Gass, S. (2013). *Second Language Acquisition: An Introductory Course*. Routledge.
4. Ellis, R. (2015). *Understanding Second Language Acquisition*. Oxford University Press.
5. Ortega, L. (2009). *Understanding second language acquisition*. London: Hodder.
6. Saville-Troike, M. (2012). *Introducing Second Language Acquisition*. Cambridge University Press.
7. Schmitt, R., Rodgers, M. (2020). *An introduction to applied linguistics*. London and New York: Routledge.

### Additional readings:

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2. Dörnyei, Z. (2009). *The Psychology of Second Language Acquisition*. Oxford: Oxford University Press.
3. Klein, W. (2014). Second language acquisition. Available at [https://www.researchgate.net/publication/49552300\\_Second\\_Language\\_Acquisition](https://www.researchgate.net/publication/49552300_Second_Language_Acquisition)
4. Scovel, T. (2000). A critical review of the critical period hypothesis. *Annual Review of Applied Linguistics*, 20, 213-223.
5. Singleton, D. (2001). Age and second language acquisition. *Annual Review of Applied Linguistics*, 21, 77-89.
6. Singleton, D., & Ryan, T. (2004). *Language acquisition: The age factor* (2nd ed.), Clevedon, UK: Multilingual Matters.
7. DeKeyser, R. (2000). The robustness of critical period effects in second language acquisition. *Studies in Second language Acquisition*, 22, 499-533.